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November 12, 2013

Ms. Sandra J. Paske
Secretary to the Commission
Public Service Commission of Wisconsin
Post Office Box 7854
Madison, WI 53707-7854

Dear Ms. Paske:

Re: We Energies Voluntary Programs. Docket No. 6630-GF-136

Enclosed is final evaluation of the Community Education Pilot. We have identified several pilot insights which could be applied at a statewide level. These high level points are

- Focus on Energy may want to consider building in a commitment component such as pledge cards, and providing a record of this commitment as part of an existing or new marketing campaign. This could be done with an online pledge form that then gets mailed to the customer as a record of their pledge.
- Focus on Energy could incentivize community groups to engage customers directly, perhaps through an award or competition of some sort. The School Energy Competition was the most successful at motivating community members to pledge and the most effective public outreach activity.
- Focus on Energy could have a regional account executive assigned to a set of communities, and he or she could be tasked with making connections with key members of the community.

If you have any questions concerning this evaluation, contact Joan Voissem, at 414-221-5424.

Sincerely,

James A. Schubilske
Vice President
State Regulatory Affairs

Enclosure

Itron

Knowledge to Shape Your Future

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information collection, analysis and application

Community Education Pilot Program
Final Evaluation Report

Prepared for
We Energies

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November 1, 2013

We Energies - Community Education Pilot Program

Final Evaluation

Final Report

This report would not have been possible without contributions by the following individuals:

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Table of Contents

List of Figures

List of Tables

Executive Summary

This executive summary provides a brief overview of CEP program activity, a description of the evaluation approach, and a synthesis of the most important findings from the process and impact evaluations.

ES.1 Overview of Program Activity

The CEP Program, branded "*Way to Save, Burlington!,*" was designed to address the following barriers:

- Limited customer awareness of energy efficiency,
- Limited motivation to take energy efficiency actions, and
- Potential lack of trust of the government and/or the utility.

To address these barriers, CEP Program implementers developed a comprehensive marketing and outreach approach based on community-based social marketing tools, such as commitments, competitions, and community-focused messaging. Program implementers employed various activities to encourage community members to sign a pledge to save energy in the hope that it would increase the likelihood of community members practicing energy efficient behaviors and purchasing energy efficient equipment. The CEP Program began in July 2010 and was originally designed to operate for one year. However, to better understand program impacts, the Public Service Commission of Wisconsin (PSCW) and We Energies agreed to continue the program through 2013.

To participate in the CEP Program, customers "pledged," or agreed to undertake their choice of up to five specific energy-saving actions. As of May 2013, a total of 1,509 customers made the pledge to save energy. Table ES-1 shows that 849 participants pledged through the School Energy Competition, 34 participants pledged through the Home Energy Makeover Contest, 24 participants pledged online, and 591 participants filled out a pledge card that was submitted through another means.

Table ES-1: CEP Program Pledge Method by Sector, as of May 2013

Pledge Method	Sector			Total
	Residential	Non-Residential	Mixed	
School Energy Competition	839	10	0	**849**
Submitted Pledge Card through Other Means	546	33	12	**591**
Home Energy Makeover Contest	34	0	0	**34**
Website	21	1	2	**24**
Unknown	9	2	0	**11**
Total	**1,449**	**46**	**14**	**1,509**

ES.2 Evaluation Approach

Energy Market Innovations, Inc. conducted the process evaluation in which the evaluation team met with the Energy Ambassador throughout the course of the evaluation to identify challenges and successes in program implementation and identify key evaluation questions. Through these discussions, along with feedback from We Energies, the evaluation team identified and conducted two primary evaluation tasks. First, the evaluation team conducted a four-phase participant panel study to learn about the participant population, participant characteristics, and the effects that program participation had on taking energy-saving actions. The second evaluation task was an analysis of the Energy Task Force (ETF), a group of community leaders that supported the Energy Ambassador. The combination of these tasks allowed the evaluation team to collect both qualitative and quantitative information from the participant population as well as feedback from key community leaders active in the program.

The impact evaluation, which was conducted by Itron, sought to determine whether the CEP Program had been successful in stimulating energy savings and encouraging energy-efficient attitudes and behaviors. The two objectives of the impact evaluation were to compare the participant and control communities in terms of: 1) deemed savings resulting from the energy efficiency programs offered by We Energies and Focus on Energy; and 2) attitudes, awareness and behaviors regarding energy efficiency and conservation. However, one caveat of the impact evaluation is that the similarities between the participant and control communities are not sufficient to provide perfect comparison groups, so any conclusions drawn from this comparison are inherently limited.

ES.3 Key Findings of Process and Impact Evaluations

This section presents the most important findings from the process and impact evaluations. These findings are presented in a manner that synthesizes results of the process evaluation with the results of the impact evaluation. Indications are given when the results of one evaluation complement or contradict the results of the other.

Program Results

It is unclear whether the CEP Program drives participation in Focus on Energy Programs among the general participant community. On one hand, the results of the tracking data analysis indicated that during the course of the CEP Program, Burlington experienced a net increase in deemed savings that exceeded program goals.[1] Compared to the control community, the participant community experienced net increases of 8% in deemed Therm savings, 109% in deemed kWh savings, and 78% in deemed kW impacts during the course of the CEP Program. On the other hand, the results of the customer surveys indicated that the percentage of customers who participated in a Focus on Energy program was no greater in the participant community than it was in the control community. However, given the small sample size, such differences are small enough that these results may not be statistically significant. One caveat of the impact evaluation is that self-reported customer surveys may produce results that are not supported by the results of tracking data analysis. Also, while customer awareness of the incentive programs offered by We Energies and Focus on Energy has increased since the start of the CEP Program, such an improvement is unlikely to have resulted from CEP activities. In fact, respondents in the participant community reported less awareness of these programs than their counterparts in the control community. However, CEP pledgees who had participated in Focus on Energy programs indicated reasons for participating that were related to the CEP program goals and activities. One possible explanation for these conflicting findings is that while the CEP Program may not have had much influence on the general population of Burlington, it could have resulted in those who pledged doing more energy efficient activities than they would have otherwise. This is supported by the fact that the CEP participants were different compared to the general Burlington population. Participants were somewhat more affluent and educated, and they also differed significantly on four of five measured attitudes; participants tended to more often agree that conserving energy is desirable and felt that they were capable of doing so.

It is unclear whether the CEP Program increased awareness of Focus on Energy programs. The survey results of the impact evaluation showed that respondents in the participant community reported less awareness of Focus on Energy programs than their counterparts in the control community. On the other hand, the results of the process evaluation[2] suggest that the

[1] The CEP Program had a goal of 1% of savings per year, but the method for calculating this goal was never established.

[2] The results of the panel study (time 4) may be found in Section 2.4.5.

timeframe of the CEP Program coincided with an increase in awareness of Focus on Energy programs among those who made the CEP pledge. In consideration of the impact and process evaluation findings, it is likely that the increase in awareness among pledgees was largely not the result of the CEP Program, but perhaps the result of a general and widespread change. On the other hand, some pledgees reported first hearing about the Focus on Energy programs through the CEP program. However, this evaluation did not systematically examine the marketing and outreach conducted on behalf of Focus on Energy, and therefore cannot comment on the effect it may have had on either community.

The CEP Program was ineffective in influencing the attitudes, beliefs, awareness, and behavior of customers in the general participant community. Respondents in the participant community were no more likely to demonstrate energy-efficient attitudes and behavior than their counterparts in the control community. While energy-efficient attitudes and beliefs have become more widespread in Burlington over the course of the CEP Program, such improvements were matched or surpassed by the control community. This finding suggests that the spread of energy-efficient attitudes and beliefs are not necessarily the result of the CEP Program, but the result of a widespread increase in such attitudes and behaviors.

The results of the process evaluation indicate a correlation between pledged participants and the adoption of energy-efficient behavior. Results from the participant panel study largely supported the program theory that the following program-specific motivations encouraged participants to pledge to save energy and conduct energy-saving actions: competitions, the community goal, and family member encouragement. Customers who made the pledge to save energy tended to conduct no- and low-cost energy-saving actions and they reported increasing the number of actions they took over time. The customers who recalled pledging reported conducting statistically significantly more energy-saving actions than those customers who had not recalled pledging.

Program Outreach and Delivery

Some program activities were successful at garnering pledges while others were more successful at reaching out to the community about ways to save energy. Overall, the most successful activities included the School Energy Competition, the Home Energy Makeover Contest, a promotional video and booth at the Community Block Party, a school fair, the promotional banner and billboard, marketing blitzes to targeted businesses, and a project to install LED streetlights. While the School Energy Competition was most successful at motivating community members to pledge, garnering 56% of the pledges (as of May 2013), it is less clear which activities were most successful at reaching out to the public. The Energy Ambassador believes that the School Energy Competition and the marketing blitzes to targeted businesses were the most effective public outreach activities.

The structure of a community-based ETF supporting an Energy Ambassador worked well but presented risks. ETF members appreciated having a dedicated and knowledgeable staff person to implement the program, and the Energy Ambassador found ETF members' feedback to be vital to program success. However, this program structure posed some risks because implementation relied almost entirely on one person, the Energy Ambassador. The majority of ETF members performed little direct outreach to their own community networks, something that the Energy Ambassador had hoped would occur. Similarly, there was little evidence to show that program participants actively talked to their peers about the program or about ways to save energy. Without community members actively spreading the word about the program, nearly all marketing and outreach responsibilities fell to the Energy Ambassador. Relying on one person to do all the outreach work is risky because it means that another person would need considerable training to step into that position.

It remains unclear whether the program in Burlington could be sustained after pilot funding ends in December 2013. Without funding for a paid Energy Ambassador, it would seem that the program would cease to operate. That being said, it is also unclear whether it would make sense to sustain program operations in Burlington given that the program would likely see decreased pledging over time since easy-to-reach customers have already pledged. As of May 2013, the Energy Ambassador reported preparing a transition plan to end the program by the end of 2013.

ES.4 Lessons Learned from the CEP Program

At the request of We Energies, the evaluation team reviewed lessons learned from the CEP Program that could be applied to other types of programs or to a statewide community-based program. These lessons learned are summarized below.

Measuring Program Activity

Evaluations are more effective when programs are designed with the evaluation in mind and when goals are established early in the program design phase. In the case of the CEP Program, the source of pledge cards was not tracked at the beginning of the pilot. Planning for evaluation from the outset would include establishing specific, measurable goals and then ensuring that data to evaluate progress toward these goals are available from the outset. Establishing indicators and goals of the program early on and throughout the program cycle allows program staff to focus efforts on activities that are specifically designed to meet the barriers targeted by the program.

Customers need a way to monitor their progress toward program goals. The energy savings goal for the City of Burlington was meant to inspire action to contribute to reducing the community's energy consumption. Participants pledged, in part, to contribute to the

community's goal. However, the community did not have a way to monitor progress toward this goal. Rather than use the results of evaluations, utilities and/or Focus on Energy should provide more ongoing feedback to customers at the community or regional level, if there is a community-wide or regional goal established. This feedback does not have to be as precise as net savings – it can be as simple as reporting program activity in a particular geographical area, and this could be compared to a baseline. Utilities and/or Focus on Energy could use simple deemed savings values to report approximately how much energy has been saved since the start of the program. Customers may also be interested in other metrics such as reduction in greenhouse gases. The idea is to present information so that customers can track relative progress over time, rather than focusing on details such as whether the savings are gross or net. At a statewide level, results for each community could be posted on utilities' websites or on Focus on Energy's community-specific websites or microsites.

Marketing and Outreach

A multi-marketing approach is useful in increasing awareness of the CEP Program. The results of the process evaluation show that participants did not always learn of the program through the same means as pledging. For example, as shown in Table 2-4, 35% of respondents who pledged through the School Energy Competition first learned about the program through some other means. Furthermore, the results of the impact evaluation indicated that different customer groups responded differently to each marketing channel. In the case of residential customers, survey results indicated that the public billboard was the most common method in reaching customers described as belonging to the *youth* or *mature* customer group, whereas newspaper advertisement was the most effective method in reaching customers described as the *family* customer group. In the case of commercial customers, the most effective methods were: town meetings for the *services* group; the Burlington Standard for the *offices* group; and the public billboard display for the *miscellaneous* group. If program administrators deem awareness lacking in a particular group, specific marketing channels may be ramped up to target a specific demographic category or commercial sector. For more information, see Awareness & Participation, Residential and Commercial Survey Results sections, or the survey results in the appendices.

A person in the community who takes an active role in the program (such as the CEP Program Energy Ambassador) is a useful means of increasing participation and awareness. For the CEP Program, the Energy Ambassador was very influential in marketing the program, whether through direct contact with customers or through various community events (see Table 2-3 and Table 2-28). Respondents rated information provided by the Energy Ambassador as the most useful of all marketing and outreach efforts (see Table 2-17), and 20% of respondents who stated they had participated in a Focus on Energy program said they heard about the program directly from the Energy Ambassador (Table 2-14). However, it is not practical to have a person in this role in every community, so other ways to fulfill this type of role should be identified.

For example, utilities or Focus on Energy could have a regional account executive assigned to a set of communities, and he or she could be tasked with making connections with key members of the community. Account executives may be particularly useful in establishing connections with the business community and spurring these connections to take action to increase awareness of energy efficiency at their respective businesses.

Customers do not necessarily correlate the CEP program with the act of pledging. The results of the follow-up survey conducted on behalf of the impact evaluation revealed that half of the residential customers who made the pledge to save energy have never heard of the *Way to Save, Burlington!* campaign. For future behavioral programs, more effective branding should be implemented so that customers associate the program with the act of pledging. For more information, see Residential Awareness & Participation, or the survey results in the appendices.

A community-focused website is the most successful means of marketing the Focus on Energy programs. The *Way to Save, Burlington!* website was the most common way that CEP participants had learned of Focus on Energy programs. As shown in Table 2-14, 43% of CEP participants aware of Focus on Energy programs had learned about them from the *Way to Save, Burlington!* website, whereas only 12% had learned about them from the Focus on Energy website. This suggests that having a website that is tailored to the community and focused on energy efficiency can be very influential in driving program participation by reaching a different segment. This can be accomplished at both the utility level and at the statewide level by having specified landing sites or microsites (i.e., standalone single web pages or clusters of pages) targeting different communities or regions. However, utilities and Focus on Energy will have to raise awareness of these websites or microsites, and provide a reason for customers to visit them.

Attitudes and Behaviors

The act of pledging is correlated with the adoption of energy efficient behavior among residential customers, especially for those who were able to recall their pledge. The pledge card used for the CEP Program was tailored to residential customers. Because the pledge cards are not a large financial investment, they may be worth considering for other programs that wish to effect changes in residential customer behavior. All of the respondents reported that they were doing at least some of the energy efficient actions they had pledged to take, as noted in the program tracking data (see Table 2-11). When the evaluation team compared the self-reported pledge to the pledge in the program tracking data, those who could more accurately remember their pledge were even more likely to have performed the actions (see description beneath Table 2-11). The utilities and/or Focus on Energy may want to consider building in a commitment component to other types of programs in the future, and providing a record of this commitment to participating customers as part of an existing or new statewide marketing campaign. This could be done statewide with an online pledge form that then gets mailed to the customer as a record of their pledge.

Customer attitudes are a major potential barrier to adopting energy-efficient behavior. Survey responses indicate that the majority of customers feel that they have already done everything possible to reduce energy consumption and many feel that they could not reduce consumption if they so desired. The CEP Program has not had a major impact in improving these attitudes which are likely preventing customers from adopting energy-efficient behaviors. Future behavioral programs will need to do more to give customers a clearer sense of their real potential for energy-efficient choices. See Figure 3-1 and Figure 3-8 for more information regarding residential and commercial attitudes and beliefs.

The majority of customers already perceive their behavior as energy-efficient. Survey results did not provide much information on barriers to energy-efficient behavior partly because the majority of respondents in both communities claimed to have already adopted such behaviors. More research is needed to determine whether these respondents have actually adopted such behavior or merely claim to have done so as the result of response bias or inaccuracy regarding their self-assessment. See Figure 3-5 and Figure 3-12 for more information.

Commercial customers encounter unique barriers to adopting energy efficient practices. More so than residential customers, commercial customers encounter barriers resulting from costs, other priorities, and the lack of local personnel responsible for energy management. (See 3-14 for more information.) Open-end responses indicated that it is a priority of many commercial customers, especially those in the service industry, to meet the comfort and demands of customers rather than reduce energy consumption. In the design of future program efforts, more research needs to be done to determine how behavioral programs might become more responsive to the needs of commercial customers.

ES.4.2 Recommendations

Because the CEP Program is a pilot program, the most important recommendation is for We Energies to continue to develop a strategic transition and/or exit plan during 2013. This will be particularly important in order to sustain favorable relations with community members. Such a plan would also play an important role in ensuring that momentum triggered by the CEP Program continues to be sustained by community members. If We Energies wants to continue conducting similar types of programs in other communities, or even sustain this program in Burlington, the evaluation team recommends the following actions:

Define non-pledge metrics to track the success of outreach efforts. While the number of pledges provides a clear quantitative understanding of program success, it does not effectively measure the relative success of each type of outreach effort. For example, while workshops did not generate many pledges, they may have been very effective at increasing knowledge and/or promoting incentive programs. Without data and/or goals to track the success of these non-

pledge impacts, understanding their success is limited. Examples of non-pledge metrics could include the number of participants who attended an event, the number of participants who later participated in an incentive program, etc. While the evaluation team can assess some of these findings, it is not possible to compare these results to any pre-determined goals, and therefore judging the success of each outreach effort is limited.

Actively engage community groups to promote the program. To further promote the program, implementers could rely more on community groups to engage customers directly. To do this, implementers would likely need to incentivize community groups to act, through an award or competition of some sort. This method was successfully utilized in the School Energy Competition whereby school leaders were in charge of collecting pledges, rather than the Energy Ambassador. Relying on individual community members to perform community engagement would likely provide the Energy Ambassador with more available time, which could be used to work with multiple communities at once, thereby reaching a larger audience. To some extent, the Energy Ambassador has begun to do this as part of the transition plan to end the program in 2013.

Provide implementers with easy-to-access consumption data. In order for implementers to better understand program impacts and promote program impacts to community members on a timely basis, they need easy access to consumption data. While We Energies was willing to provide this information, it proved challenging to access in real time.

Provide customers with a reminder of their pledge. Participant survey results showed that participants were more likely to carry out their pledge if they were able to remember what they pledged. A third of respondents thought a reminder would be useful, and they most commonly reported wanting to receive an email reminder (47%) or a refrigerator magnet (38%).

Develop a separate pledge card for residential customers and non-residential customers. The pledge card used by the CEP Program is designed for the residential setting and few actions are transferrable to the non-residential setting. In order to ensure that businesses can pledge to take actions, We Energies should develop a separate pledge card for non-residential customers. These pledges might need to be less prescriptive, as businesses tend to have more unique needs requiring custom initiatives.

ES.5 Conclusions

The results of the process and evaluations may be distilled into three major findings. First, the results of the process evaluation indicate that customers who directly participated in the CEP Program by making the pledge to save energy reported adopting energy efficient attitudes and behaviors. Second, the results of the impact evaluation demonstrate that customers in the participant community were no more likely to adopt energy efficient attitudes and behaviors than their counterparts in the control community. Any contradiction implied by these two findings is resolved by the third major finding that during the course of the CEP Program, the activity in We

Energies and Focus on Energy incentive programs increased in the participant community relative to the control community. The synthesis of these three major findings would suggest that while the CEP Program does not drive change in attitudes and participation among the general community, it does drive change in customer attitudes and participation among the customers who made the pledge to save energy. While the CEP Program was not effective in increasing energy-efficient behavior and attitudes in the participant community as a whole, it was effective in doing so among pledged customers, and as a result led to greater energy savings than what would have occurred without the program. While those who pledged tended be somewhat different demographically, and also tended to value energy efficiency more compared to the general Burlington population, it appears that the act of pledging resulted in increased energy efficiency among this highly engaged group.

1

Introduction

In July 2010, We Energies initiated a community-based energy efficiency program, the Community Education Pilot (CEP) Program. The CEP Program is a marketing and outreach program that relies on community-based social marketing tools, such as pledges and competitions, to drive participants to save energy. It aims to 1) generate 1% energy savings annually within a defined community, Burlington, Wisconsin, and 2) collect 2,250 pledges to save energy from community members by December 2013. The Burlington community developed this goal through discussions with the program's Energy Ambassador, the program manager, and an Energy Task Force (ETF), a group of volunteer community members that support the Energy Ambassador's implementation of the CEP Program. The program is expected to continue operating through December 2013, at which point We Energies will assess program results and consider next steps.To assess program results, We Energies contracted with Itron and Energy Market Innovations, Inc. to conduct an impact and process evaluation of the CEP Program. This chapter presents an overview of all evaluation activities, including the contents of the process and impact evaluations.

1.1 Evaluation Approach

The CEP Program is a behavior change program at its core. There are several frameworks or models for effecting behavior change. The CEP's components most closely resemble those of the Community-Based Social Marketing (CBSM)[1] model. There are numerous theories and models on behavior change that have influenced the model for CBSM. The most relevant of these theories is the Theory of Reasoned Action, which describes the role of intentions, attitudes and beliefs in the creations of behaviors, and the Theory of Planned Behavior, which describes the perception of how difficult it is to perform certain behaviors. Both of these theories assume that a behavior change follows a shift in intention.

[1] *Public Outreach and Behavior Change: An Annotated Reference Guide for Outreach Practitioners.* Research and text by Gwenn Kubeck. Corvallis, OR: Oregon Sea Grant, Oregon State University, 2007.

CBSM utilizes a number of tools[2] to effect behavior change. These include:

- Individual commitment to take action,
- Prompts/reminders to take action,
- Development of community norms,
- Communication of messaging,
- Incentives to promote change, and
- Removal of external barriers to change.

We Energies' Community Education Pilot has incorporated several of these tools into the design of the program. The CEP Program is a comprehensive effort and does not measure performance from specific marketing and outreach efforts in any defined way. Instead, the success of particular marketing and outreach activities are judged through informal measurements, such as whether community members pledged to save energy or attended in program-sponsored events.

It may be possible using a single impact evaluation method to measure changes in energy use (i.e. savings), but this does not measure causality. In order for a single method to successfully measure both impact and causality, an experimental design[3] is required. This pilot program was not developed to be a true experiment (i.e. random selection of program participants and non-participants) as the program features did not lend themselves to such a design. As a result, the evaluation uses multiple methods in order to estimate savings and causality as best possible. An important component of the evaluation is the use of a control community which does not receive any CEP specific program exposure. This control community is used to attempt to capture forces in the market that could influence the treatment community's attitudes and behaviors towards energy use in the absence of the CEP Program.

1.2 Overview of Evaluation Activities

The overall goal of the evaluation[4] is to gather evidence as to whether the CEP has been successful in influencing the participant community to adopt energy-efficient behavior over time. To accomplish this goal, the evaluation has two principal components: 1) a process evaluation conducted by EMI; and 2) an impact evaluation conducted by Itron, Inc.

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2 McKenzie-Mohr, Doug, and Smith, William. *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing*. New Society Publishers, Gabriola Island, B.C. 1999

3 Cook, Thomas D., and Donald T. Cambell. Quasi-Experimentation, Design and Analysis Issues for Field Settings. Boston: Houghton Mifflin Company, 1979.

4 This evaluation follows the CEP Program First-Year Evaluation Report, Prepared for We Energies, July 10, 2012. The First-Year Evaluation Report included a billing analysis component, which was inconclusive and therefore not revisited for the Final Evaluation Report.

The process evaluation conducted by EMI consists of:

- A program overview, complete with program theory and logic model;
- An analysis of the Energy Ambassador's perspective;
- An analysis of participant perspective;
- An analysis of the Energy Task Force perspective;
- Lessons learned; and
- Conclusions and Recommendations.

The impact evaluation, conducted by Itron, consists of:

- An description of control community selection;
- An analysis of program activity and tracking data;
- A summary of customer attitudes, beliefs, participation rates, awareness levels and behaviors as described by results of the participant surveys;
- Lessons learned; and
- Conclusions.

Descriptions of the process and impact evaluation goals appear in more detail in the introductory paragraphs of their respective sections.

1.3 Organization of Report

The remainder of this report is organized as follows:

- Section ES presents the executive summary;
- Section 2 presents the results of the process evaluation,
- Section 3 presents the results of the impact evaluation,
- Appendix A presents the survey instruments used for the panel study,
- Appendix B presents the survey instruments used for the ETF analysis,
- Appendix C presents the residential customer survey instrument,
- Appendix D presents the commercial customer survey instrument
- Appendix E presents the results of Burlington residential survey,
- Appendix F presents the results of Watertown residential survey,
- Appendix G presents the results of Burlington commercial survey, and
- Appendix H presents the results of Burlington commercial survey.

2

Process Evaluation Results

2.1 Introduction

In July 2010, We Energies initiated a community-based energy efficiency program, the Community Education Pilot (CEP) Program. The CEP Program is a marketing and outreach program that relies on community-based social marketing tools, such as pledges and competitions, to drive participants to save energy. It aims to 1) generate 1% energy savings annually within a defined community, Burlington, Wisconsin, and 2) collect 2,250 pledges to save energy from community members by December 2013.[1] The Burlington community developed this goal through discussions with the program's Energy Ambassador, the program manager, and an Energy Task Force (ETF), a group of volunteer community members that support the Energy Ambassador's implementation of the CEP Program. The program is expected to continue operating through December 2013, at which point We Energies will assess program results and consider next steps. To assess program results, We Energies contracted with Itron and Energy Market Innovations, Inc. to conduct an impact and process evaluation of the CEP Program. This chapter presents final results from all process evaluation activities, including results from interviews and surveys with the Energy Ambassador, participants, and ETF members. The approach used by the evaluation team is summarized next, followed by a description of the chapter organization.

2.1.1 Process Evaluation Approach

The evaluation team met with the Energy Ambassador throughout the course of the evaluation to identify challenges and successes in program implementation and identify key evaluation questions. Through these discussions, along with feedback from We Energies, the evaluation team identified and conducted two primary evaluation tasks. First, the evaluation team conducted a four-phase participant panel study to learn about the participant population, participant characteristics, and the effects that program participation had on taking energy-saving actions. To conduct the participant panel study, the evaluation team surveyed a sample of

[1] We Energies has 10,635 unique customers (9,906 unique residential accounts and 729 unique commercial accounts) in Burlington. Therefore, the goal of 2,250 pledges represents 21% of We Energies customers in Burlington. It should be noted that a) pledges are made by individuals and not by all members of a household which is equivalent to a We Energies customer and b) many pledges came from people living outside of the City of Burlington.

program participants over the course of a year and a half. The evaluation team drew the participant sample group from the program database, which listed all community members that submitted a pledge to save energy. All participants that pledged as of May 2012 were included in the participant sample pool. Because the third and fourth surveys, conducted in November 2012 and June 2013 respectively, focused on collecting changes to behavior and communication over time, the evaluation team did not distribute the survey to any participants that pledged after May 2012. Because the evaluation team did not include participants who pledged after May 2012 in the sample, this report does not provide any information on those pledgees.

The second evaluation task was an analysis of the Energy Task Force (ETF), a group of community leaders that supported the Energy Ambassador. To complete the ETF analysis, the evaluation team conducted in-depth telephone interviews and online surveys with ETF members. The combination of these tasks allowed the evaluation team to collect both qualitative and quantitative information from the participant population as well as feedback from key community leaders active in the program. These data collection efforts occurred in December 2011 to February 2012 and thus feedback focuses on roughly the first half of program implementation.

2.1.2 Chapter Organization

The remainder of this chapter presents results from each evaluation task and summarizes keys findings. Section 2.2 provides a program overview, including a description of the program theory and logic model. Section 2.3 presents feedback from the Energy Ambassador and includes his assessment of the success of various program activities. Section 2.4 offers participant perspectives on the program by presenting results from the participant panel study. Section 2.5 characterizes ETF perspectives by presenting results from interviews and surveys with ETF members that were conducted in late 2011 and early 2012. Section 2.6 presents a summary of lessons learned from the pilot study that can be applied to a variety of initiatives, not just the specific model implemented by the CEP pilot. The last section of this chapter presents conclusions by synthesizing findings across stakeholder perspectives and presents recommendations for future program implementation efforts. All data collection instruments are found in the Appendix.

2.2 Program Overview

The CEP Program, branded "*Way to Save, Burlington!*" began in July 2010. The pilot program was originally designed to operate for one year in one community; however, through conversations with the Public Service Commission of Wisconsin (PSCW), We Energies extended the program to three and a half years, with a slated end in December 2013, in order to more fully understand program impacts.

The CEP Program was designed to address the following barriers:

- Limited customer awareness of energy efficiency,
- Limited motivation to take energy efficiency actions, and
- Potential lack of trust of the government and/or the utility.

To address these barriers, CEP Program implementers developed a comprehensive marketing and outreach approach based on the following community-based social marketing tools: commitments, competitions, and community-focused messaging. Through various program activities, program implementers encourage community members to sign a pledge to save energy. Program implementers hope that such a commitment will increase the likelihood of community members practicing energy efficient behaviors and purchasing energy efficient equipment. Focusing on one community allows implementers to pilot the effectiveness of social marketing and determine whether it would be a successful tool to disseminate to other communities.

To participate in the CEP Program, customers "pledged," or agreed to undertake their choice of up to five specific energy-saving actions. As of May 2013, 849 participants had pledged through the School Energy Competition, 34 participants pledged through the Home Energy Makeover Contest, 24 participants pledged online, and 591 participants filled out a pledge card that was submitted through another means.[2] Table 2-1 details pledge method according to whether participants were residential, nonresidential, or mixed. The remainder of this section summarizes the program theory and logic.

[2] Because the evaluation team did not assess program activities after May 2013, we did not access the implementer's database after this date (See Section 2.1.1).The CEP program database contained 1,641 pledges as of May 2013, however the evaluation team identified 132 duplicate records in the population file and therefore removed these pledges from the pledge count. The evaluation team identified duplicates using name and email address.

Table 2-1: CEP Program Pledge Method by Sector, as of May 2013

Pledge Method	Sector			Total
	Residential	Nonresidential	Mixed	
School Energy Competition	839	10	0	**849**
Submitted Pledge Card through Other Means	546	33	12	**591**
Home Energy Makeover Contest [a]	34	0	0	**34**
Website	21	1	2	**24**
Unknown	9	2	0	**11**
Total	**1,449**	**46**	**14**	**1,509**

[a] There were actually 37 contestants in the Home Energy Makeover Contest; however the record of pledges only lists 34. The three missing contestants from the Home Energy Makeover Contest likely pledged through another method.

2.2.1 Program Theory and Logic Model

The CEP Program relies on an "Energy Ambassador," who is a staff member from the implementation team, to administer the program. While the Energy Ambassador relies on other staff and volunteers for support, he does the majority of the implementation work. He described himself as a "one man marketing machine." The Energy Ambassador provides a "face" to energy efficiency, which implementers hope will break down the perceived trust barrier and encourage more customers to participate in the program.

The Energy Ambassador relies on an Energy Task Force (ETF) to develop and vet marketing and outreach ideas. The ETF is composed of a group of volunteer community leaders who meet regularly (roughly every six weeks). The Energy Ambassador originally characterized these volunteers as some of the community's "movers and shakers;" however, over time, members also included less senior-level community members. Some of these volunteers are generally committed to energy efficiency and the CEP Program, while others appear to have joined due to vested interest in the program (e.g., one member is a We Energies employee, another wanted to be involved in decision-making that might influence their organization). By coordinating program efforts with the ETF, implementers hope to achieve increased community ownership of the program and a toolbox of techniques suited to Burlington (see 1-4 in the logic model in Figure 2-1). Eventually, implementers hope the ETF could create long-term commitment to energy efficiency in the community, which would allow implementers to move their efforts to different communities.

One of the first tasks assigned to the ETF was to develop a goal for the program. Through initial discussions, the ETF developed a set of community goals, including a primary goal of creating 1% energy savings per year and a secondary goal of collecting 2,250 pledges to save energy from community members by December 2013. The Energy Ambassador advertised these goals

as a means to alert the community and raise awareness of energy efficiency. Implementers hoped the community goal would lead community members to make energy efficiency changes by encouraging long-term pride within the community (see 5-7, 13, 18, and 19 in Figure 2-1).

Once a savings goal was established, the implementation team began developing marketing and outreach strategies, which the Energy Ambassador vetted with the ETF. The ETF typically approves a particular idea before the Energy Ambassador implements it in the community or target market within the community. The Energy Ambassador is often the person performing the work, although he regularly partners with contractors, volunteers, and utility staff to support his activities. The following list provides a high-level summary of marketing and outreach activities represented in the program logic model:

Write news articles – The Energy Ambassador maintains a relationship with news agencies to promote program exposure in the local Thursday newspaper, The Standard Press, the weekly Sunday advertising magazine, The Hi-Liter, and a City of Burlington quarterly community newsletter. The target audience is the entire community of Burlington and its purpose is to raise awareness of the CEP Program, We Energies and Focus on Energy incentive programs, pledges, outreach events, and ways to change behavior. The underlying theory of the program is that raising awareness can motivate individuals to save energy. (See 8 and subsequent boxes in Figure 2-1.)

Meet with large businesses and key decision makers – The Energy Ambassador reaches out to large businesses to encourage them to install energy efficient equipment or to modify operations. The Energy Ambassador also works with their facility managers or environmental teams to identify means to reach out to employees on ways to save energy in their home. In addition, the Energy Ambassador reaches out to community leaders to encourage members in their networks to participate in the program. The intent of these meetings is to raise awareness of energy efficiency opportunities among customers with the greatest potential for energy savings and/or among particular community groups. (See 9 and subsequent boxes in Figure 2-1.)

Respond to customer inquiries – The Energy Ambassador meets with individual community members in person or via the telephone to inform them of financial incentives and engineering support available through We Energies, Focus on Energy, and federal tax incentives. While the Energy Ambassador does not typically conduct energy audits, he can connect community members to individuals that can do this type of work and provide a list of contractors that perform energy efficiency upgrades. These individual meetings are aimed at increasing awareness of energy efficiency opportunities to ultimately help create energy savings (See 10 and subsequent boxes in Figure 2-1.)

Conduct outreach events – The Energy Ambassador conducts a variety of outreach events including booths at farmers markets, workshops at community centers (the library/non-profits), and promotions at businesses. Banners advertising the program were also displayed in downtown Burlington. These activities are expected to raise awareness of energy efficiency, and

in turn are intended to motivate individuals to save energy. (See 11 and subsequent boxes in Figure 2-1.)

Maintain website – The Energy Ambassador maintains a website: www.waytosaveburlington.com. The website is intended to raise awareness of energy efficiency and garner pledges. Raising awareness is expected to motivate individuals to save energy. (See 12 and subsequent boxes in Figure 2-1.)

Recruit pledges – To commit community members to save energy, the Energy Ambassador recruits individual pledges at events and through the website. Each individual who pledges states that he or she will take specific action(s) to save energy. According to social marketing theory, pledging should lead pledgers to follow through with their commitment, and thus change their behavior.[3] Community members who interact with the program through other means are all encouraged to sign a pledge form. (See 14 and subsequent boxes in Figure 2-1.)

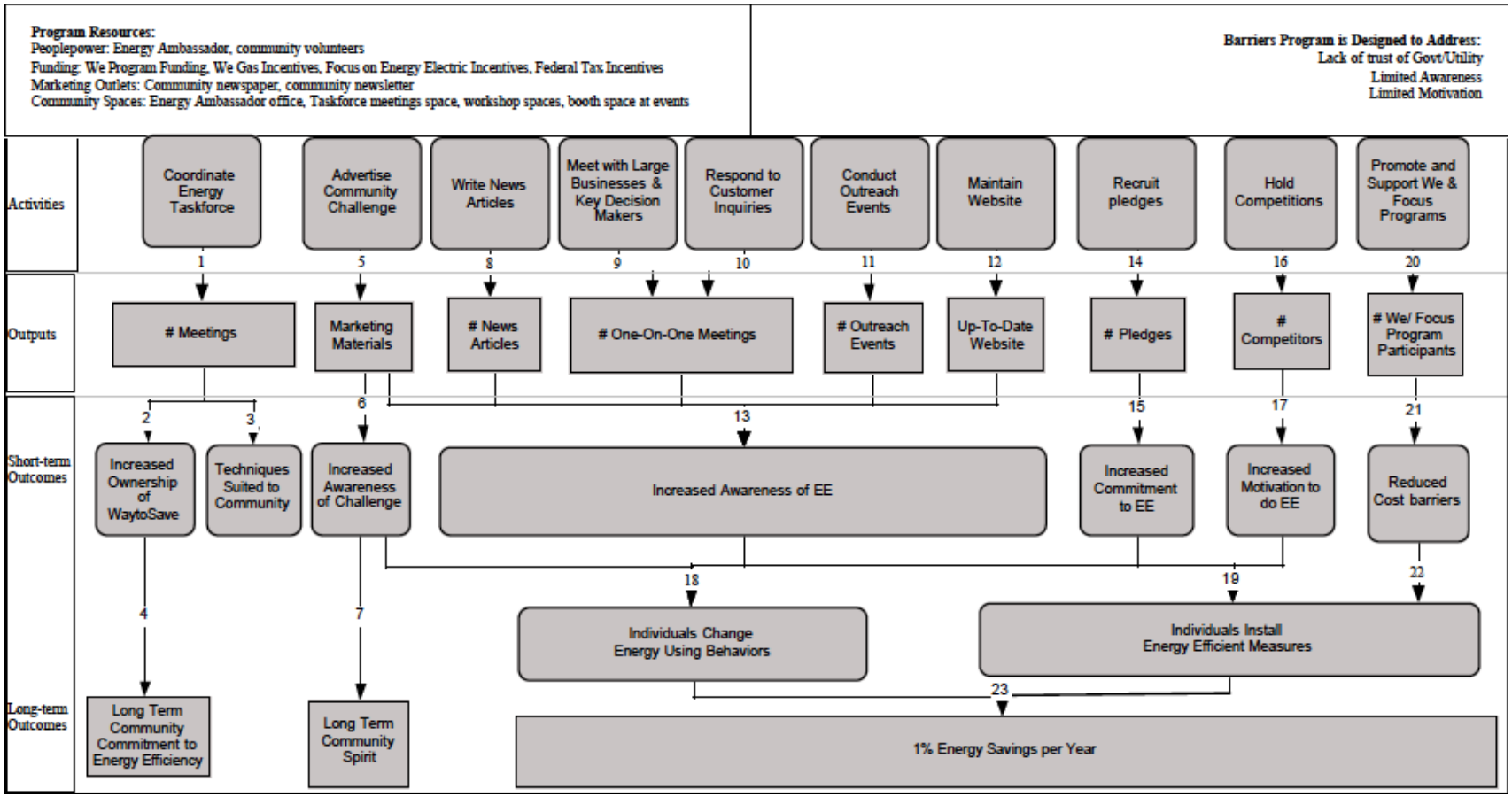
Hold Competitions –The Energy Ambassador promotes and manages a series of energy-related competitions, or contests to win various prizes for pledging, throughout the community. The purpose of the competitions is to raise awareness of energy efficiency and motivate customers to conduct energy efficient behaviors. (See 16 and subsequent boxes in Figure 2-1.)

Promote and Support We Energies and Focus on Energy Programs – The Energy Ambassador promotes the financial incentives and services offered by We Energies and Focus on Energy so that customers are aware of the opportunities available through We Energies and Focus on Energy. The purpose of these programs is to reduce cost barriers to energy efficiency. (See 20 and subsequent boxes in Figure 2-1.)

While We Energies originally intended the CEP Program to assess the use of social marketing tools, the Energy Ambassador implements the CEP Program in a comprehensive effort and does not systematically measure impacts from specific social marketing tools in any defined way. Instead, the Energy Ambassador identifies effective marketing and outreach techniques through informal measurements, such as whether community members attend and participate in events, provide positive feedback through informal communication channels, or complete pledges. Based on these indicators, the Energy Ambassador shifts future marketing and outreach activities to focus on efforts that draw greater participation. Figure 2-1 below presents the logic model for the CEP Program.

[3] McKenzie-Mohr and Smith (1999). *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing*. New Society Publishers.

Figure 2-1: CEP Program Logic Model



2.3 Energy Ambassador's Perspective

The evaluation team met with the Energy Ambassador throughout the course of the evaluation. These meetings highlighted his perspectives on program implementation and also served to provide the evaluation team with program updates. Through these discussions, it became clear that while the implementation team conducted all activities described in the logic model, some marketing and outreach activities became more defined and/or emphasized over time. The primary marketing and outreach activities implemented in 2011, 2012, and 2013 included: holding competitions, promoting the program through businesses, conducting outreach events, conducting general marketing, and performing a few miscellaneous activities. This section provides a description of the Energy Ambassador's perspective on the relative success of each activity implemented through the program between 2011 and 2013. When relevant, the evaluation team also synthesizes the Energy Ambassador's perspective with results from data collected from participants and ETF members. Because the CEP Program is a comprehensive effort and does not systematically measure impacts from specific marketing and outreach efforts in any defined way, this section documents implementation experiences, which helped to serve as an initial assessment of the relative success of each program activity.

This section does not present information on activities that the Energy Ambassador was not able to mobilize as of when the evaluation team wrote this report. The Energy Ambassador and ETF discussed many activity ideas that were not implemented at all and thus the evaluation team received no documentation on those ideas; however there were two ideas that the Energy Ambassador and ETF hoped could be implemented but were not: the K-12 Energy Education Program (KEEP) in Burlington and a large-scale business reward program with businesses throughout downtown Burlington. The KEEP initiative, which trains teachers in energy issues, did not launch because the Energy Ambassador was not able to engage enough teachers to participate in the program. The large-scale business reward program would have engaged many businesses in offering discounts to customers if customers pledged to save energy. It did not launch because the Energy Ambassador could not garner enough businesses to participate. Instead of completing a large-scale reward program, the Energy Ambassador began working with individual businesses to offer discounts to customers. These individual business efforts are documented in Table 2-2.

As shown in Table 2-2, some program activities were successful at garnering pledges while others were more successful at reaching out to the community or teaching community members about ways to save energy. As documented in Table 2-2, overall, the most successful activities included the School Energy Competition, the Home Energy Makeover Contest, a promotional video and booth at the Community Block Party, a school fair, the promotional banner and billboard, marketing blitzes to targeted businesses, and a project to install LED streetlights. The School Energy Competition was most successful at motivating community members to pledge,

garnering 56% of the pledges (as of May 2013). It is less clear which activities were most successful at reaching out to the public. According to the Energy Ambassador, the School Energy Competition and the marketing blitzes to targeted businesses were the most effective public outreach activities. The remaining text presents findings related to each type of program activity implemented.

Table 2-2: Relative Success of Program Activities by the Energy Ambassador

Activity Type	Activity List	Description	Success (Very; Moderate; Less) [a]	
Hold Competitions	**School Energy Competition**	Students asked to bring pledges home for parents and then serve as Home Energy Manager; some principals were active and some were not- which resulted in varying levels of pledge activity	✓+	Very successful: Garnered majority of pledges. (EA, database)
	Home Energy Makeover Contest	Residents signed up and submitted videos for why they should receive an energy makeover	✓+	Very successful: Did not collect many pledges but did serve as good means to get the word out to the community. (EA, ETF)
	Facebook Competition	Entered random drawing for "Liking" the Facebook page	✓	Moderately successful: Increased number of Facebook "likes"; readers began sharing posts but posts did not become viral. (EA, PP)
	Business Energy Makeover Contest	Canvassed businesses to participate in makeover competition (similar to Home Energy Makeover)	✓-	Less successful: Very limited participation among businesses, potentially due to scheduling event over the summer. (EA)
Promote through Businesses	**Rewards Program**	True Value/ Wal-Mart provided displays; True Value offered discount to pledgees	✓	Mixed success: Staff did not have any incentive to sell the pledge/discounts. Wal-Mart more successful because more traffic flow; True Value did not have large traffic flow. Some pledges lost/mis-placed when Wal-Mart management transition occurred. (EA)
	Movie theater	Movie goers provided opportunity to pledge at movie theater and receive 2 for 1 Tickets	✓	Relatively few pledges were collected, but according to the theater owner, advertisements before movies are effective in increasing awareness. (EA)
Conduct Outreach Events	**Screened promotional movie and operated booth at Community Block Party**	Premiered promotional movie and operated booth at community event	✓+	Very successful: Movie provided an easy means to get the word out to the community because it was seen by a large group of people. (EA)
	Operated booth at school fair	Attended a school fair at one intermediate school to reach out to students and parents.	✓+	Very successful: Engaged both students and parents in energy efficiency and garnered about 40 additional pledges. Also engaged teachers at other schools who are interested in organizing similar fairs. (EA)
	Conducted outreach to staff at large businesses	Collaborated with corporate energy teams to encourage employees to sign pledge and help businesses plan for EE improvements. Operated booths at corporate fairs at Nestle and Veralia.	✓	Moderately successful: Gained moderate-level of employee pledges (100/firm) and developed good working relationship with companies' environmental teams. The corporate fairs were effective in reaching groups who would not otherwise be exposed to outreach events because they work at night. (EA)
	Operated booths at community events	Events included Home Expo and Chocolate Festival	✓	Moderately successful: Did not garner many pledges but was able to reach out to general public; Home Expo booth most successful because it reached target audience. (EA)
	Operated booth at Farmers Market	Attended markets to reach out to public	✓	Moderately successful: Good way to get word out when program first started but did not collect substantial pledges and ultimately not successful enough to justify repeating in future summers. (EA)

This table synthesizes findings with those from participant and ETF perspectives when available. Source Abbreviations: EA = Energy Ambassador, ETF = Energy Task Force members, PP =participant panel study.

Table 2-2 (Continued): Relative Success of Program Activities by the Energy Ambassador

Activity Type	Activity List	Description	Success (Very; Moderate; Less)[a]	
Conduct General Marketing	**Banner**	Large sign downtown	✓+	Very successful: Physical presence provided good means to get the word out. (EA, ETF)
	Billboard	Large sign downtown	✓+	Very successful: Physical presence provided good means to get the word out. (EA, ETF)
	Targeted marketing efforts (downtown businesses; business types)	Targeted "blitzes" to certain business types using door-to-door marketing	✓+	Very successful: Good means to target message to particular community members. Many contacts ultimately completed an energy assessment and thereby pledged. (EA)
	Website	Provides on-line presence and ability for people to pledge online	✓	Moderately successful: Seen as necessary means to verify program online but has not garnered significant number of pledges. (ETF)
	Facebook Account	Provides social media presence	✓	Moderately successful: More "Likes" than City of Burlington posts not viral. (EA)
	Newsletters	Monthly(roughly) newsletters	✓	Moderately successful: Results show limited usefulness but still likely valuable at reminding participants of pledge and program. (PP)
	Media Releases	Newspaper articles to inform public on major events; successes	✓	Moderately successful: Results show limited usefulness but still likely valuable means to reach general public. (PP)
	Twitter Account	Provides social media presence	✓-	Less successful: Readers tend to be people in the industry (rather than community members). (EA)
Other	**Research LED cobrahead streetlights**	Performed and presented feasibility study to inform installation of LEDs throughout City where cobrahead fixtures exist	✓+	Very successful: Funding for the project has been approved, and is currently being implemented. The project will potentially be expanded to include interior and exterior lighting on all city buildings. (EA)
	Conduct Workshops	Conduct EE workshops with community groups	✓	Moderately successful: Results show limited number of attendees, but they were valuable to those people who attended. (PP)
	Coordinate with Express Energy Efficiency Program	Piggybacking on FoE program	✓	Moderately successful: The coordination did not result in any pledges, but was successful in bringing the program to Burlington. (EA)

This table synthesizes findings with those from participant and ETF perspectives when available. Source Abbreviations: EA = Energy Ambassador, ETF = Energy Task Force members, PP = participant panel study.

The Energy Ambassador described competitions as the program activity that generated the most pledges and positive publicity (see Table 2-2). The program held four competitions, all during 2011 and 2012. The most successful competition was the School Energy Competition, held in the spring of 2012, whereby participating schools distributed pledge forms to their students. Students were asked to serve as an educational and motivational resource within their homes and have their caregiver sign the pledge form. Students brought back the pledge form to their schools, and a random drawing for an iPad was conducted for all students who submitted a form. In addition, the school that collected the most pledges won prize money. This competition generated the majority (56%) of all pledges collected. Not only did the Energy Ambassador

view this competition as particularly successful, but also its success was confirmed through participant responses. Participants reported that the School Energy Competition motivated them to actually pledge (see Section 2.4.3). In addition, the evaluation team found that communication among family members about ways to save energy increased following the competition (see Section 2.4.3). The evaluation team did not collect any relevant data from ETF members because the competition was held after the evaluation team interviewed and surveyed ETF members.

Other competitions included a Home Energy Makeover Contest, implemented in the fall of 2011, whereby community members could enter to win an energy makeover of their home; a Business Energy Makeover Contest, held in the summer of 2012, whereby businesses were entered to win an energy makeover; and a Facebook Competition over the summer of 2012 to draw more activity to the Facebook page. The Home Energy Makeover Contest served to kick-start the program, and the Energy Ambassador along with the majority of ETF members deemed the contest to be a successful marketing component of the program. Participant feedback on the Home Energy Makeover Contest was limited and thus no additional findings are presented in this chapter. According to the Energy Ambassador, the Facebook Competition encouraged more participants to "like" the *Way to Save* Facebook page, resulting in more "likes" than the City government, according to the Energy Ambassador. The Energy Ambassador also reported that the Facebook Competition led to more of the *Way to Save* Facebook posts being shared. Because the Facebook Competition occurred after the evaluation team interviewed ETF members and drew the final participant sample, participant feedback on the Facebook Competition was limited and thus no additional findings are presented in this chapter. The least successful of all the competitions, according to the Energy Ambassador, was the Business Energy Makeover Contest, because participation was lower than expected. The Energy Ambassador attributed lower participation to timing, stating that many employees and managers were on summer vacation at the time of the contest. Because this competition occurred after the final participant sample was drawn and after the ETF data collection occurred, the evaluation team did not identify any additional relevant findings.

The next activity defined in Table 2-2 is promotion of the program through local businesses, which started in the spring of 2012. Two stores, the local True Value store and a Wal-Mart, promoted pledges when customers bought equipment focused on energy or water efficiency. In addition, the local movie theater began running an advertisement for the program at the beginning of movies and provided discounts to theater patrons who submitted a pledge. According to the Energy Ambassador, the business promotions had mixed success. The Energy Ambassador reported that of these three promotions, the most successful was the Wal-Mart promotion because of high customer traffic. However, in May 2013, the Energy Ambassador reported that Wal-Mart had recently implemented managerial changes and thus the pledge boxes had unfortunately been misplaced. The Energy Ambassador attributed lower than expected

pledges from all of these promotions to the fact that individual employees were not incentivized to promote the program. Since the Energy Ambassador implemented these activities after the evaluation team's final sample was drawn and after the ETF member interviews, the evaluation team was not able to assess success of these promotions.

The Energy Ambassador also organized and participated in a variety of outreach events (see Table 2-2). These outreach events mostly comprised manning booths at community events. The events were very dispersed and included attending the farmers market throughout the summers of 2011 - 2013, promoting the program at events conducted by large businesses in the area, such as Nestle and Veralia, and being present at large community events, such as the Chocolate Festival and the Home Expo. In particular, the Energy Ambassador felt that fairs held at Nestle in the fall of 2012 were effective at reaching community members who otherwise would not have been exposed to messaging at other events, because they work during the night shift. In addition, in the fall of 2012, the Energy Ambassador manned a booth at the annual community block party and aired a promotional movie about the program prior to a free movie viewing for the public. The Energy Ambassador reported the block party was very successful because the promotional movie was seen by a large percentage of the Burlington community. Additionally, the Energy Ambassador manned a booth at an environmental fair held at an intermediate school. The Energy Ambassador also felt that this was very successful because it actively engaged students as well as parents, and gained the interest of teachers at other schools who wanted to organize their own school fairs. While the evaluation team was not able to specifically assess the block party or school fair, it did collect some data on other outreach activities. Outreach events served as a common way for participants to learn about the program (see Section 2.4.3).

In addition to these activities, the Energy Ambassador performed a variety of general marketing for the program, including managing the program's website, Facebook and Twitter accounts, producing a large banner and billboard downtown, providing electronic newsletters to participants, contributing to newspaper articles, and developing advertisements about the program (see Table 2-2 (Continued)). The Energy Ambassador reported that the banner and billboard were the most successful means of mass marketing because they provided a visual presence for the program in the middle of downtown Burlington. In addition to these mass-marketing techniques, the Energy Ambassador conducted targeted "blitzes" to certain business types using door-to-door marketing techniques with defined businesses throughout the City of Burlington. The blitzes focused on particular business sectors at a time, such as car dealers or downtown shops. The Energy Ambassador reported that the commercial blitzes were very successful as they generated a number of leads for energy audits and incentivized energy efficiency retrofit projects. While ETF members agreed that the banner and billboard were a very successful means of mass marketing, they did not specifically identify the commercial blitzes. Participant survey results did not highlight either of these activities as being particularly successful; however there were very few commercial participant respondents and thus the

participant survey did not specifically assess this activity. Participants, on the other hand, commented that the newspaper articles were a common means to learn about the program (see Section 2.4.3).

Lastly, the Energy Ambassador conducted a number of ad hoc activities (see Table 2-2 (Continued)). For example, the Energy Ambassador prepared a feasibility study for installing "cobra head" LED streetlights in Burlington. The City funded this project in 2012, and the project was being implemented at this time of this report. The City is considering expanding this project to included interior and exterior lighting at all city buildings. The Energy Ambassador also conducted workshops on energy efficiency, with a variety of community groups throughout 2011 and 2012. According to the Energy Ambassador, while attendees found the workshops useful, very few Burlington community members attended any of the events, thereby limiting the overall success of the workshops. Finally, the Energy Ambassador also coordinated with a Focus on Energy pilot program called the Express Energy Efficiency Program that performed direct installation of small energy efficiency measures in homes. While the Energy Ambassador was successful in bringing the program to Burlington, it did not result in any additional pledges.

2.4 Participant Perspective

This section presents participant perspectives on the CEP Program by providing results from a four-phase, online participant panel study. This section first summarizes the evaluation team's objectives and approach to conducting the participant panel study. It then characterizes the participant population, presents feedback on participant program experiences, describes how the program has influenced energy efficiency behaviors, describes participants' awareness and participation in Focus on Energy programs, and summarizes respondents' suggestions for program improvements. The section concludes by summarizing key findings of the participant panel study. Note that this section provides highlights from the surveys conducted across all four time points, and when appropriate, focuses on results from a single time point. Detailed results specific to the first three panel studies can be found in prior reports.

2.4.1 Objectives and Approach

As defined in the evaluation team's scope of work, the participant panel study had the following objectives:[4]

- Characterize program awareness,
- Determine participants' level of interaction with the community,

[4] The scope of work was defined in an internal evaluation team memorandum entitled "We Energies CEP Pilot Evaluation – Revised Scope of Work," submitted to the evaluation team manager on October 5, 2011.

- Understand the demographics, attributes, and motivations of customers who actively participate in the program,
- Document potential barriers to participation in particular activities,
- Characterize effectiveness of specific outreach and marketing events, and
- Understand effective elements of program delivery.

Determine awareness of and participation in Focus on Energy programs among participants

To address these objectives, the evaluation team conducted a series of four online surveys with program participants to track participation over time. In the first survey, the evaluation team surveyed the population of community members who participated in the program from the program inception through October 2011. The second survey was targeted both at participants who completed the first survey (to track their experiences over time) and at new participants who participated in the program between November 2011 and May 2012. A third survey was completed in November 2012, aimed at tracking all participants who completed the second survey. Finally, a fourth survey was completed in June 2013, following up with participants who completed the third survey. While the evaluation attempted to assess all activities conducted through May 2013, the team was not able to gather any data on participants who pledged after May 2012 because those participants did not pledge until after the second survey sample was drawn. This section summarizes results from the final survey and compares them to results from the first, second, and third surveys. Table 2-3 defines these different sample groups, which are referred to throughout the remainder of this section when presenting results. P1 refers to the phase 1 sample (who first took the survey in November 2011), and P2 refers to the phase 2 sample (who first took the survey in June 2012). T1 through T4 refers to the four time points for each of the four waves of the panel study.

Table 2-3: Participant Panel Study Sample Groups

Sample Group	Community-wide Baseline Survey (Jul-11)	First Survey (Nov-11)	Second Survey (Jun-12)	Third Survey (Nov-12)	Fourth Survey (Jun-13)	Community-wide Followup Survey (Jul-13)
General Population Sample	Baseline (n=739)					Followup (n=751)
Participant Samples		P1T1 (1st participant sample, surveyed at time 1 (n=59)	P1T2 (1st participant sample, surveyed at time 2 (n=28)	P1T3 (1st participant sample, surveyed at time 3 (n=21)	P1T4 (1st participant sample, surveyed at time 4 (n=17)	
			P2T2 (2nd participant sample, surveyed at time 2 (n=128)	P2T3 (2nd participant sample, surveyed at time 3 (n=79)	P2T4 (2nd participant sample, surveyed at time 4 (n=53)	

2.4.2 Participant Characteristics

This section characterizes participant samples by program activity, sector and geographic distribution, sector characteristics, attitudes, and awareness. The majority of this section

describes the total participant sample (P1T1+P2T2); however notable differences are identified between sample groups and the community-wide baseline survey sample, which characterizes the general Burlington population. For clarification on sample group names, please refer to Table 2-3.

Program Participation

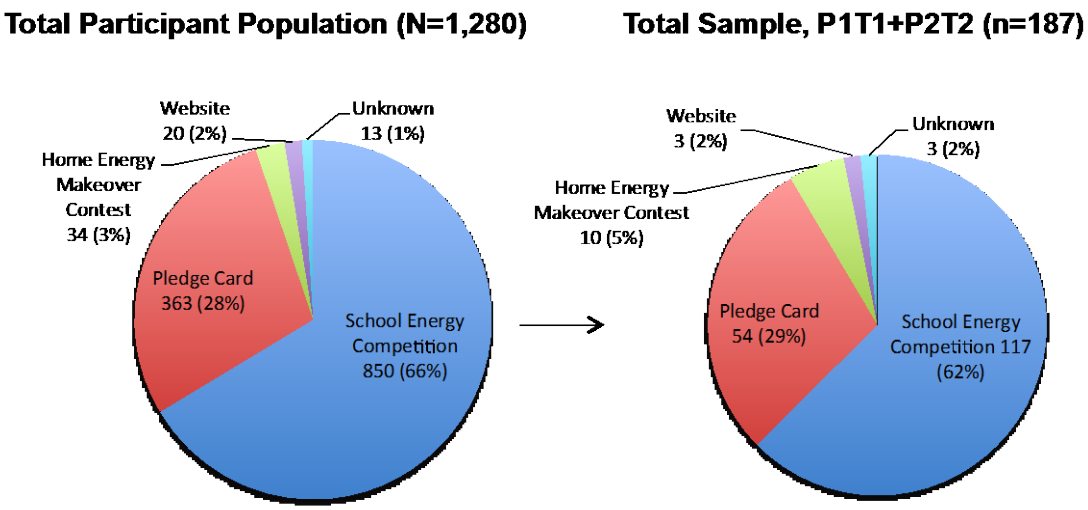
Anyone who participated in the program signed a pledge card. As of May 2013, the Energy Ambassador had collected 1,509 unique pledges, with 96% of these from residential customers.[5] Due to the scope and timing of this evaluation, the evaluation team did not survey participants who pledged after May 2012, and thus Figure 2-2 only summarizes the distribution of 1,280 pledges collected as of May 2012. As shown, the majority (66%) of community members through May 2012 had pledged through the School Energy Competition. About a quarter (28%) of the participation population pledged using a pledge card, presumably at a community event or workshop.[6] The Energy Ambassador collected the remaining pledges either via the website, participation in the Home Energy Makeover Contest, or some unknown means. Interestingly, while the Energy Ambassador reported that the Home Energy Makeover Contest was a great success at marketing the program, it did not collect a large number of pledges. Only 34 community members actually pledged through the Home Energy Makeover Contest.[7] As shown in Figure 2-2, the distribution of pledges among the sample of participants who completed the survey is very similar to that of the total population as of May 2012. The new participant respondents from the second survey – the phase 2 sample, or P2 – mostly represented community members who pledged through the School Energy Competition, while the original participant respondents – the phase 1 sample, or P1 – tended to represent participants who signed a pledge card through a community event or the Home Energy Makeover Contest.

[5] According to program tracking records, the program reported receiving 1,641 pledges as of May 2013; however the evaluation team identified a number of repeat pledgers through duplicate names or email addresses. Of the 1,509 unique pledges, 56% were from the School Energy Competition, 39% were pledge cards, 2% were from the Home Energy Makeover Contest, 2% were from the website, and 1% were unknown.

[6] The evaluation team is unable to report where these pledges came from because program tracking data did not track the method by which pledges were collected in 2011.

[7] Thirty-seven contestants actually participated in the Home Energy Makeover Contest, but three contestants pledged through another means, according to program tracking data.

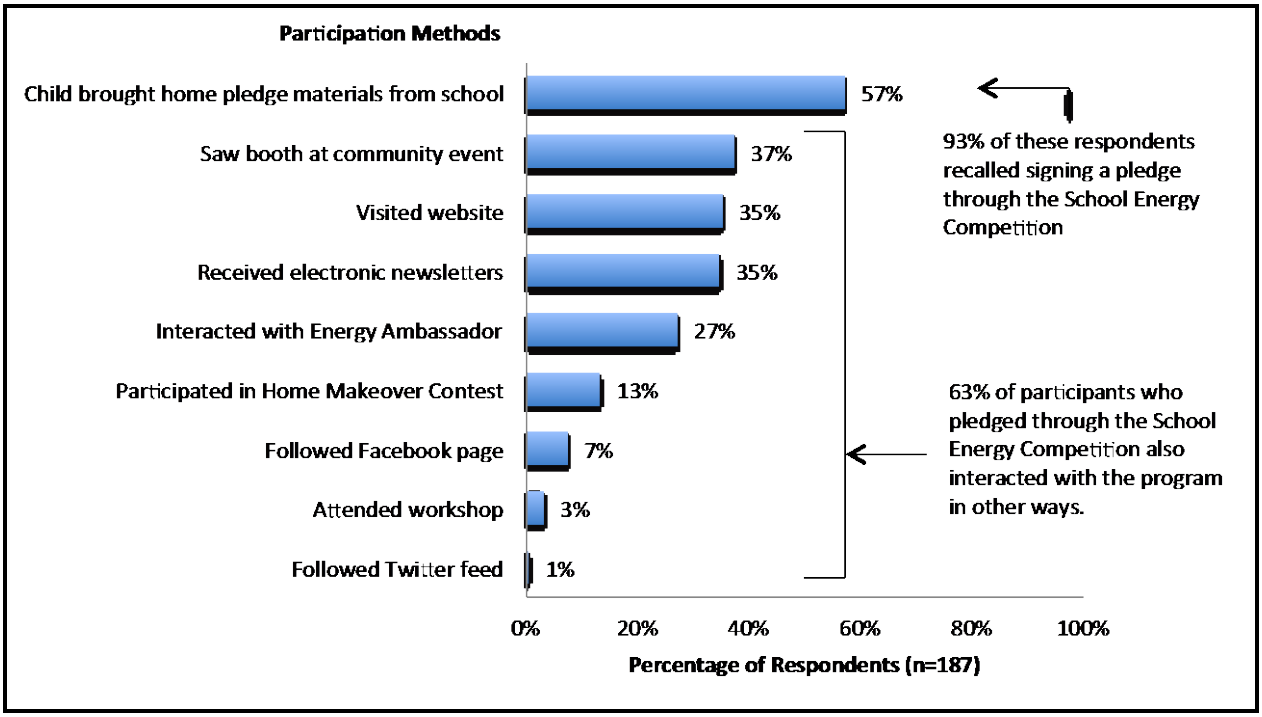
Figure 2-2: Pledge Distribution for Total Population and Total Participant Sample, as of May 2012



Note: The pie chart on the right side of this figure shows the total sample, or all respondents of the phase 1 sample at time 1, plus all respondents of the phase 2 sample at time 2 (P1T1 + P2T2).

Also important to note is that while participants pledged within the particular buckets identified in Figure 2-2, survey respondents reported interacting with the program through a variety of activities. Figure 2-3 shows that 63% of participants who pledged in the School Energy Competition also reported to have interacted with the program in other ways.

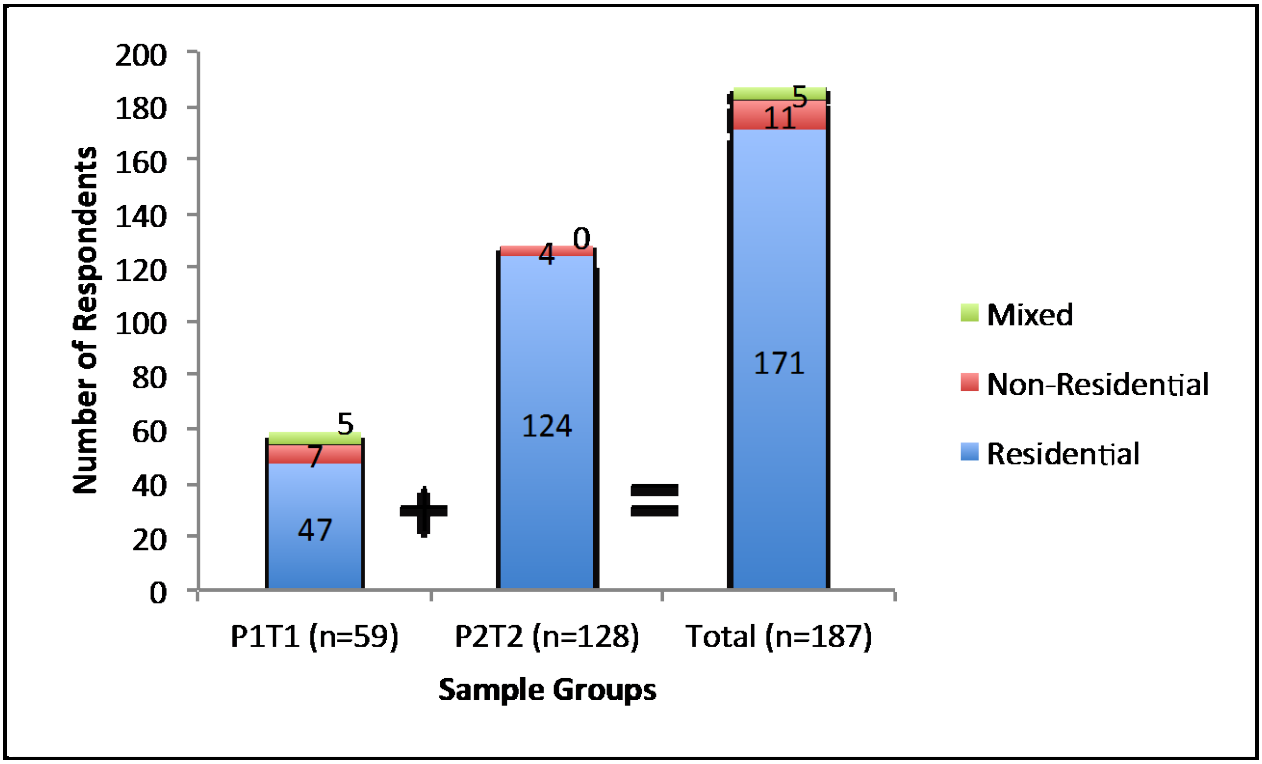
Figure 2-3: Participant Interactions with the CEP Program (P1T1+P2T2)



Sector and Geographic Distribution

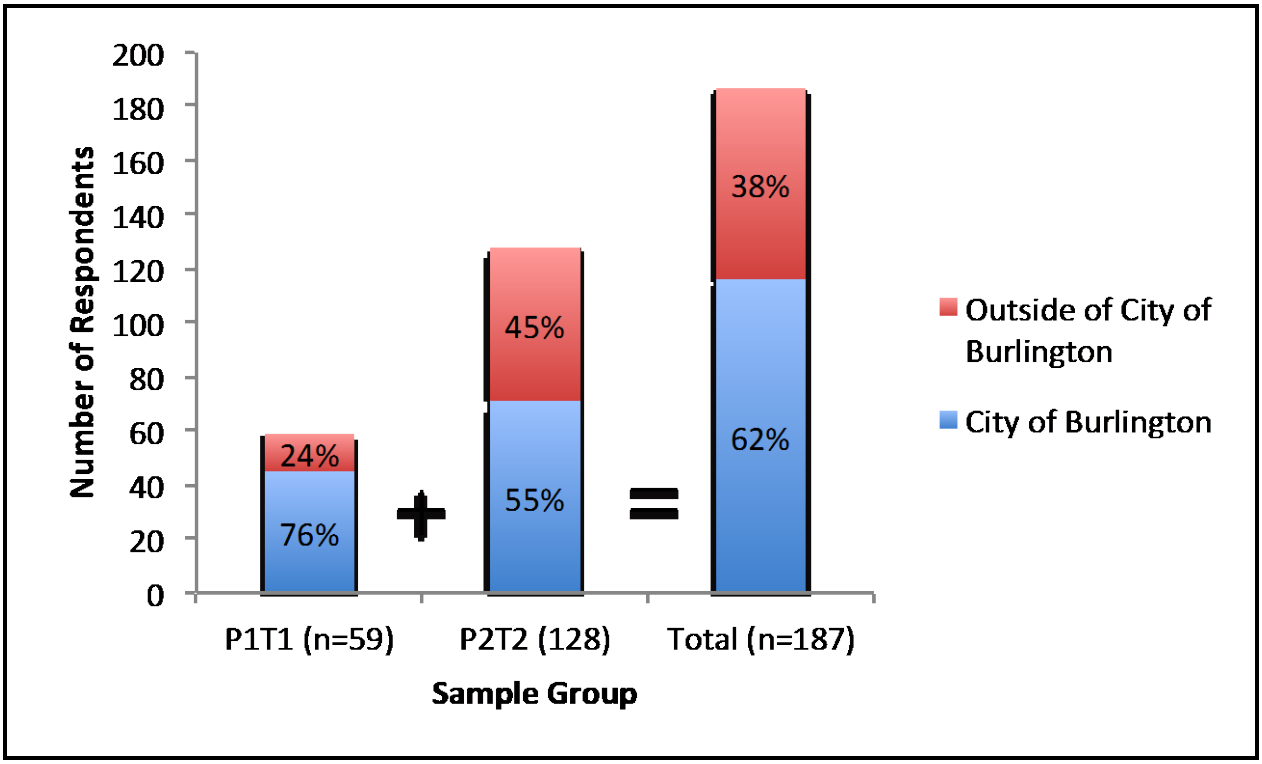
Because the majority of program activities (e.g., School Energy Competition, Home Energy Makeover Contest, and booths at community events) have been directed toward the residential population, it is not surprising that the majority (91%) of respondents are residential customers (Figure 2-4).

Figure 2-4: Sector Distribution Among Participant Respondents (P1T1+P2T2)



The program targeted the City of Burlington rather than the greater region in order to contain the program and also because working and coordinating with multiple municipal governments would have been more challenging. While participants tended to live within the City of Burlington, 38% of participants reside or operate their participating business outside of the City of Burlington (Figure 2-4). The evaluation team did not ask these respondents to specify where they lived/operated, but presumably they lived/operated within the greater Burlington region. While this circumstance is expected, it does have implications for the overall impacts of the program, because it is reaching community members outside of the City of Burlington. In other words, energy savings from the CEP Program could be lower than expected because more than a third of the participant population resides outside of the City and thus evaluators would not be able to count their energy savings. Additionally, many community members who sign a pledge are not able to fully take advantage of the program because some activities (i.e., the Home Energy Makeover Contest and the Business Energy Makeover Contest) are only eligible for City of Burlington residents and business owners.

Figure 2-5: Geographic Distribution of Participant Respondents (P1T1+P2T2)



Residential Characteristics

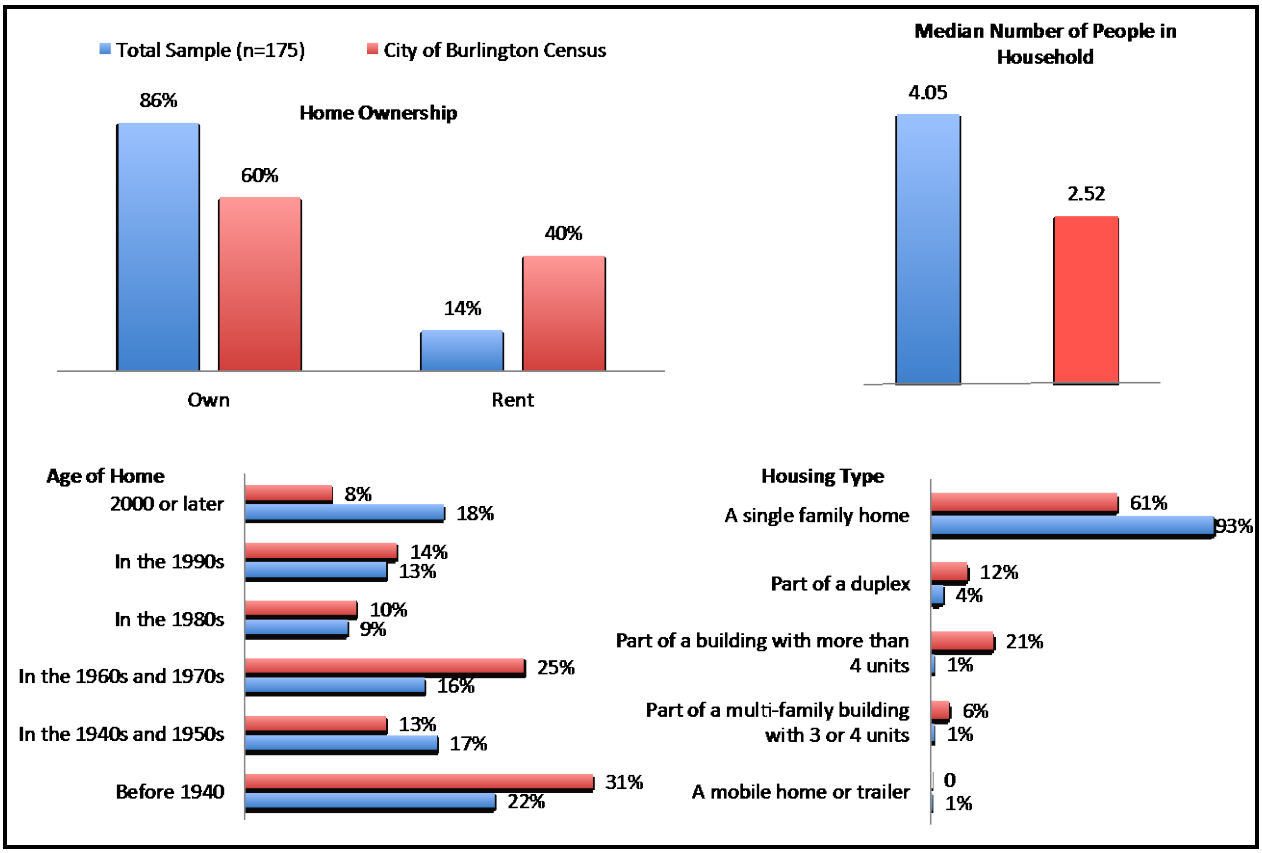
The evaluation team examined a variety of residential characteristics to better understand the types of community members participating in the CEP Program. Participants tended to own their own home, live in a single family home built before 1940, have a college degree, earn a household income of $60,000-$99,000, and have four people living in their household. These characteristics tend to represent a slightly more affluent and educated community compared to the general Burlington population. The following paragraphs explore these key statistics in more detail and compare program participant population data with Census data for the City of Burlington.

Figure 2-6 summarizes characteristics relating to housing ownership, housing type, and housing stock. As shown, the majority (86%) of participant respondents owned their own home, while only 60% of the general population reported owning their own home, according to the 2011 Census estimates.[8] Nearly all participant respondents live in a single-family home (93%), compared to only 61% of the general population. Participant housing stock was more similar to that of the general population. Twenty-two percent of the participant population lived in homes built before 1940, while 31% of the general population lived in homes built before 1940.

[8] Census data based on the 2007-2011 American Community Survey, United Status Census Bureau. http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none

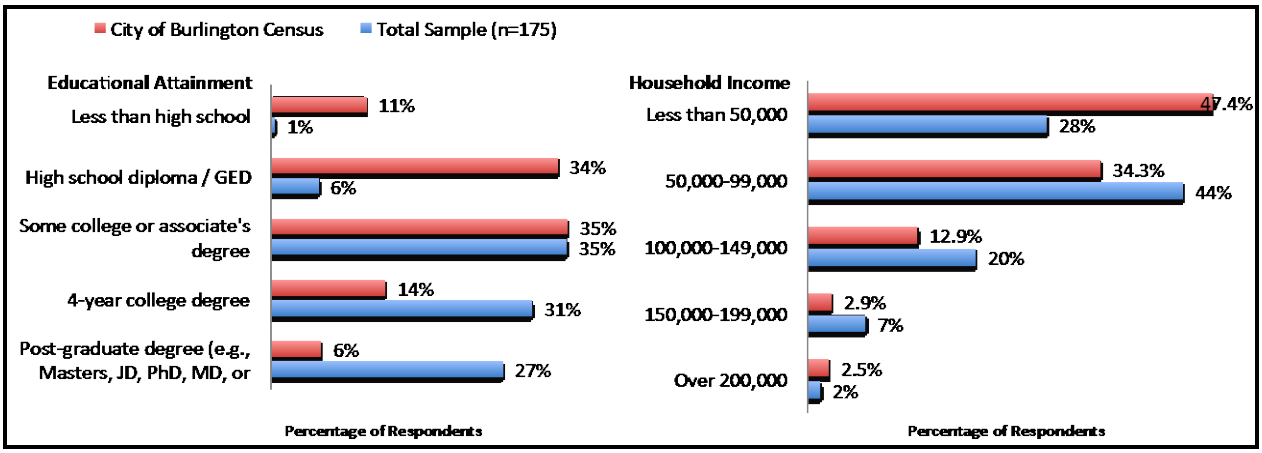
Interestingly, the mean number of people living in each home was greater among participants (4.20) compared to the general population (2.52). This difference is likely due to the fact that a large majority of participant respondents participated in the School Energy Competition, which would increase the number of families with children participating in the program compared to the general population.

Figure 2-6: Participant Housing Characteristics Compared to City of Burlington



Participants also differed from the City of Burlington population with respect to education and income-levels (Figure 2-7). Thirty-one percent of participants reported holding a four-year college degree, while only 14% reported doing so within the general population. With regards to income-levels, participant households were most commonly earning between $50,000 to $99,000, which is slightly higher than that of the general population (44% of participants reported this income level, compared to 34% of the general population). A large difference was seen for income levels less than $50,000. According to participant survey results, 28% of participants earned less than $50,000, while 47% of the general population reported earning less than $50,000.

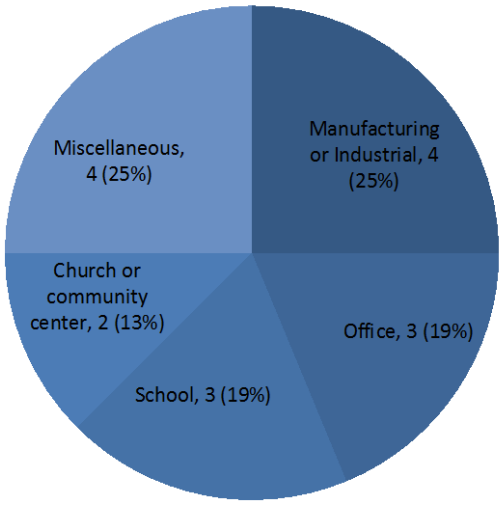
Figure 2-7: Participating Residential Education and Income-Levels Compared to City of Burlington



Nonresidential Characteristics

In total, there were 16 respondents who were either considered to be commercial (11) or mixed sector (5), meaning that the respondent represented both a residence and a business. Of the 11 commercial respondents, 10 worked in the City of Burlington. The other business customer presumably worked in the surrounding region. Surveyed participants were primarily the owner (5 of 16, or 31%) or managing supervisor (5 of 16, or 31%) of their organizations, although other participants included administrative assistants and building and grounds employees. The types of participating businesses that completed the survey varied (see Figure 2-8). The most frequently reported facility type was manufacturing (4 of 16, or 25%). Other facility types included community centers, multi-family buildings, government facilities, healthcare facilities, office buildings, and schools.

Figure 2-8: Participating Nonresidential Facility Types



(n = 16)

Nonresidential respondents most commonly reported that they worked in small businesses: half of the nonresidential respondents (8 of 16) worked at a facility with ten or fewer employees, and ten of the businesses reported working at an organization that had only one location. Furthermore, the majority of respondents (12 of 16) indicated that their organizations paid their own electric and gas bills directly to We Energies. A little over half of the nonresidential respondents (9 of 16) reported that their business had no formal or informal energy efficiency policy in place.

Participant Attitudes

In addition to examining basic demographic characteristics of respondents, the evaluation team polled survey participants about their attitudes concerning energy usage and efficiency. By comparing the responses to these questions to responses from the community-wide baseline and follow-up surveys, the evaluation team could determine how program participants differed from the general Burlington population.[9]

Overall, attitudes of residential participant respondents were fairly similar to those of the baseline survey respondents (Figure 2-9). At the time of the first survey, the majority of participant respondents reported that they believed conserving energy was important, that they could reduce how much energy their households use if they wanted to, that a person did not have

[9] The community-wide general population baseline and follow up surveys were conducted as part of the impact evaluation. The baseline survey of Burlington residents and business owners was conducted before the pilot program began (referred to herein as the "baseline survey"), and these community members were surveyed again in June 2013 (referred to as the "follow up survey") to identify changes to attitudes, beliefs, and energy efficiency actions.

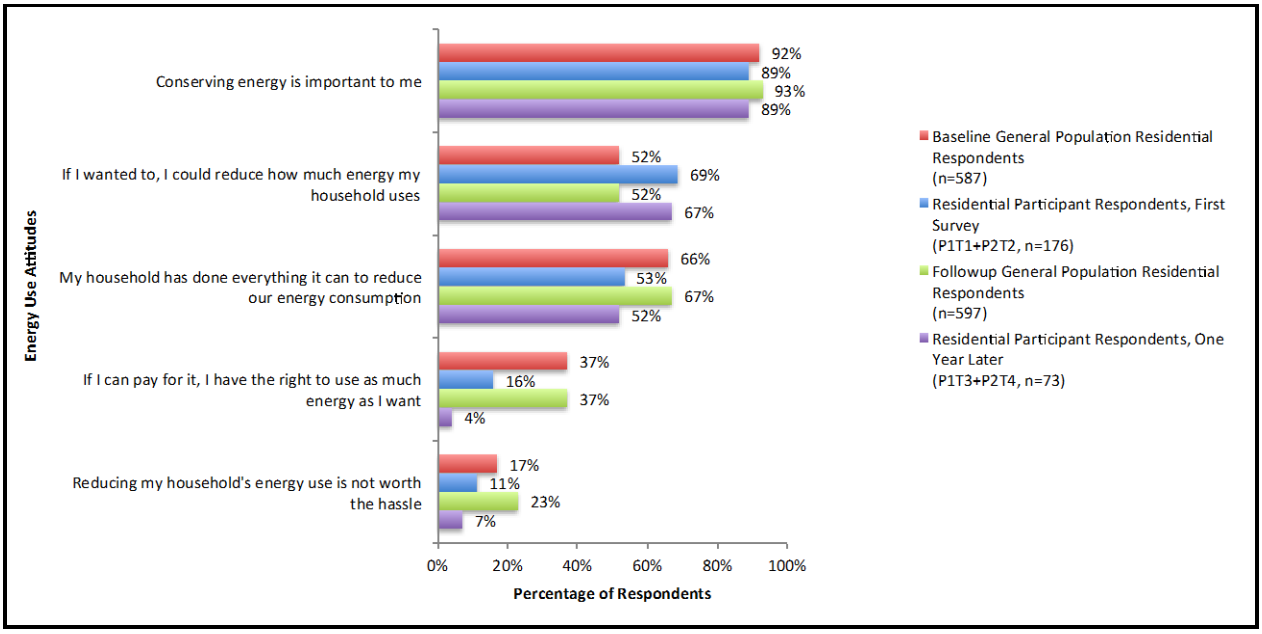
a right to use as much energy as they wanted if they could afford it, and that reducing their households' energy use was worth the hassle. Participant respondents were mixed as to whether their household had done everything they could to reduce energy consumption (only 53% said they had done so). One year later, participant attitudes were very similar, with two exceptions: many more participants agreed one year later that they could reduce how much energy their households use, and fewer felt that a person has a right to use as much energy as they want to use.

When participant responses were compared to community-wide baseline survey responses, three major differences stood out. The biggest difference was that fewer participants thought they had a right to use as much energy as they wanted, compared to the baseline survey respondents (16% compared to 37%, respectively, $p < .001$). Similarly, more residential participant respondents thought they could reduce their energy use if they wanted, compared to baseline survey respondents (69% compared to 52%, respectively, $p < .001$). Finally, fewer participant respondents thought that their households had already done everything to reduce energy use, compared to baseline responses (53% compared to 66%, respectively, $p < .01$). Additionally, participants were somewhat less likely than baseline survey respondents to believe that reducing their household's energy use was not worth the hassle (11% compared to 17%, respectively, $p < .05$). Overall, compared to the general population, participants tended to more often agree that conserving energy is desirable and that they were capable of doing so.

While it is possible that these differences in attitudes were a result of program participation, it is also possible that participants were initially more likely to engage in the program because of these differences in attitudes regarding energy. However, when comparing responses among participants at the time that they first took the survey with responses one year later, there was a statistically significant change in one attitude; participants were less likely to agree with the statement, "If I can pay for it, I have the right to use as much energy as I want" one year later (4%) compared to the time of their first survey (16%, $p < .05$). This suggests that the program may have had some influence on at least this one specific attitude.

Interestingly, it does not appear that the program impacted changes in attitudes among the general Burlington population; the percentages of general population respondents agreeing to each statement at the baseline survey compared to the follow up survey are very similar.

Figure 2-9: Residential Energy Use Attitudes



Note. Respondents rated their agreement with each statement on a scale of 1 (strongly disagree) to 10 (strongly agree). Percentages indicate those respondents who provided a rating of 6 or higher.

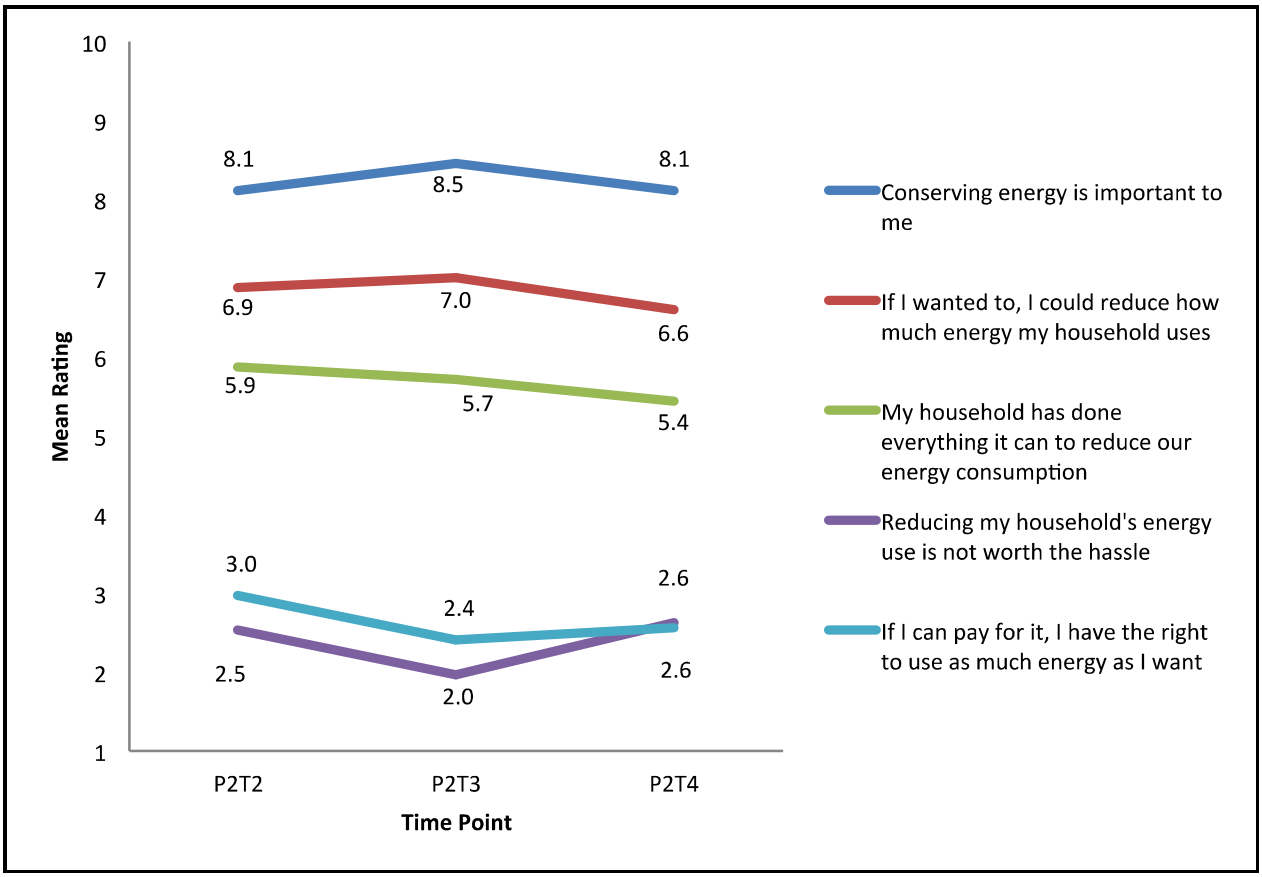
The evaluation team performed statistical tests to determine whether participant attitudes differed by pledge method, or if mean energy use attitudes changed over time (rather than just looking at percent agreement at the first survey and then one year later, as shown in Figure 2-9). The evaluation team found no statistical difference in participants' attitudes based on their method of pledging.[10]

Figure 2-10 shows attitudes examined over time for the P2 sample (the P1 sample was not tested due to low sample size). Changes over time were statistically significantly different for only one attitude: "reducing my household energy use is not worth the hassle." Specifically, a repeated-measures ANOVA showed that there was a significant difference ($F(2, 50) = 4.25$, $p < .05$) between time 3 ($M = 1.96$) and time 4 ($M = 2.63$, $p < .05$) for the P2 sample, suggesting that participants tended to increasingly feel that reducing their energy use was not worth the effort. It appears that, over time, the program had some influence on this attitude but then began to wane; however, with a significant change in only this one attitude, it is difficult to draw any firm conclusions. In comparison with Figure 2-9, which looked at percent agreement across one year for both samples, when looking at mean ratings for only the P2 sample, mean ratings over time for the statement "If I can pay for it, I have the right to use as much energy as I want" are not

[10] A one-way ANOVA test compared attitudes between 3 pledge types: Pledge Card, School Competition, and "Other" (makeover contestant, website, and unknown). No significant differences were found.

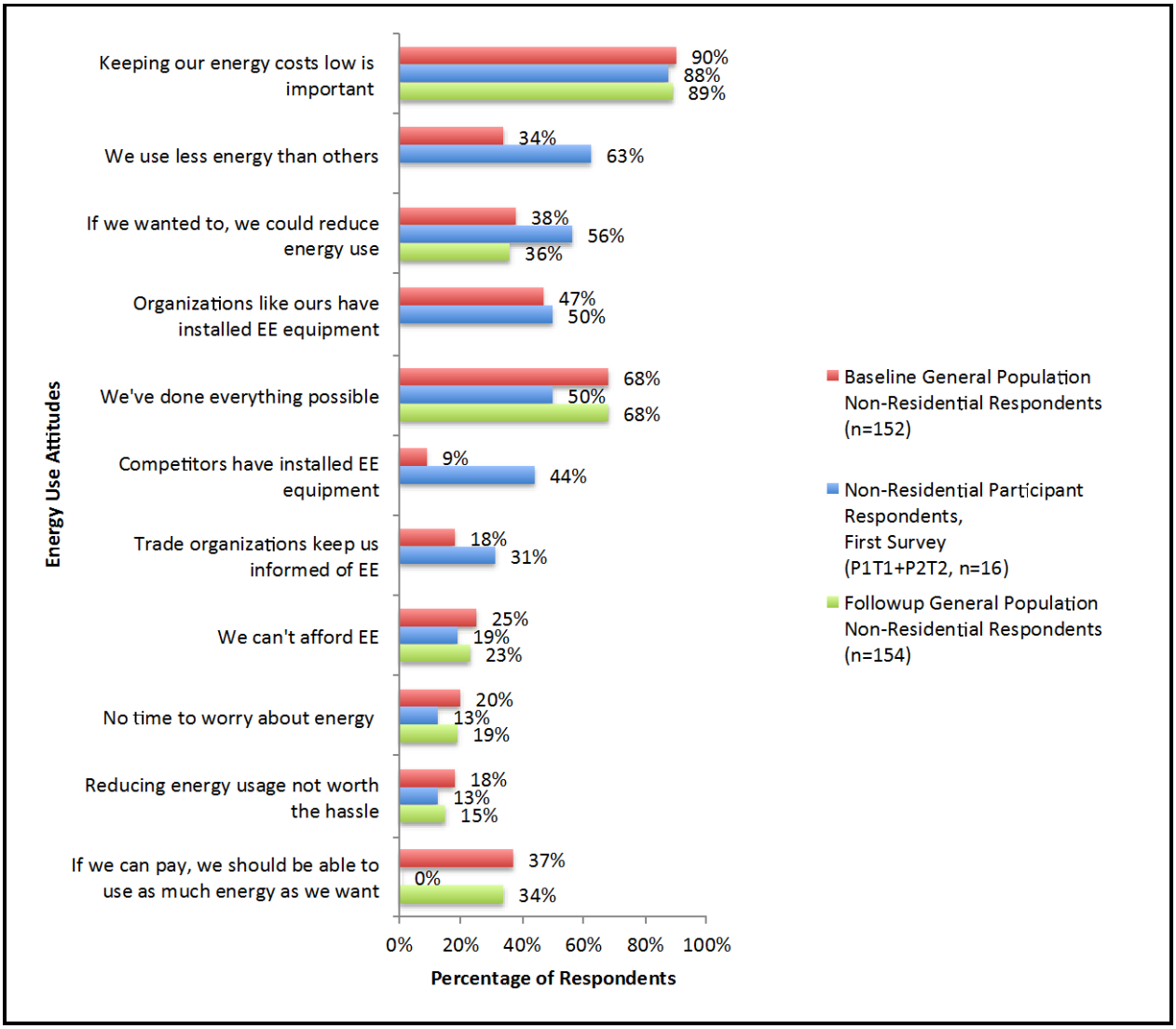
significantly different. Differences in the P1 sample over time appear to be driving the significant change discussed with the findings shown in Figure 2-9.

Figure 2-10: Participant Energy Use Attitudes Over Time



Comparing nonresidential attitudes between the participant sample and the community-wide baseline sample revealed greater differences than the attitudes among the residential samples (as shown in Figure 2-11). While these differences were large, the nonresidential participant sample size was extremely small (n=16), and thus results were inconclusive. That being said, nonresidential participant respondents were much more inclined to report that they use less energy than others, to say that they could reduce their energy use, and were less likely to say that they have done everything possible. They were also more likely to report that their competitors had installed energy efficient equipment and that trade organizations keep them informed of energy efficiency, compared to the general Burlington population. Because the nonresidential sample size was small, the evaluation team did not perform statistical tests of differences over time. General population responses were very similar at the baseline and at the follow up. Nonresidential responses for participant attitudes one year later are not shown due to low sample sizes.

Figure 2-11: Nonresidential Energy Use Attitudes



Note. Respondents rated their agreement with each statement on a scale of 1 (strongly disagree) to 10 (strongly agree). Percentages indicate those respondents who provided a rating of 6 or higher.

2.4.3 Program Experiences

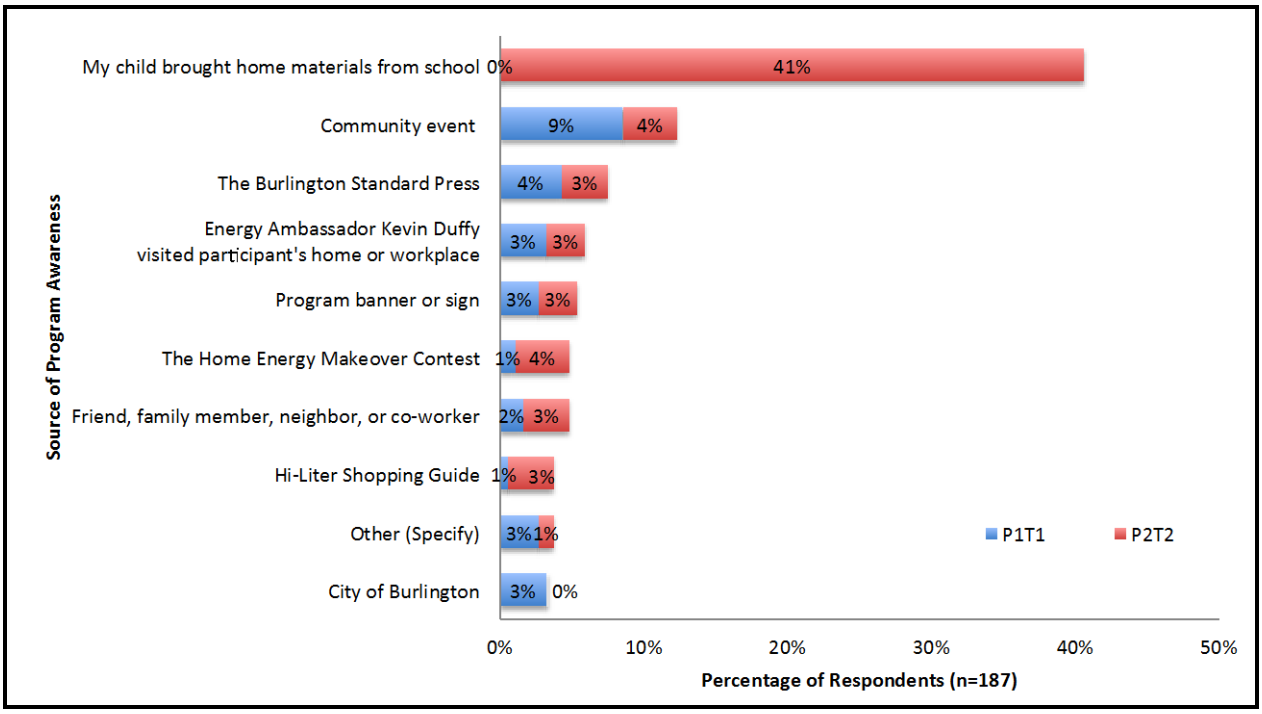
The evaluation team also asked program participants about their experiences with the program. This section provides a summary of program experiences and includes the following topics: marketing and outreach, motivations to participate, barriers to participate, experiences with specific program activities, satisfaction with each activity, and usefulness of each activity.

Marketing and Outreach

The CEP Program leveraged several marketing channels to raise awareness of energy efficiency in Burlington. These methods included signs posted in heavily trafficked areas of town, booths at community events, newspaper articles, face-to-face visits, and advertisements and articles in

mass media outlets (e.g., newspapers, shopping guides). Figure 2-12 presents how participants first became aware of the program by sample group. Respondents most frequently reported that the primary means through which they first became aware of CEP was through the School Energy Competition (41%). Respondents also commonly reported that they first heard of the program through a community event (13%), the Burlington Standard Press newspaper (7%), direct contact with the Energy Ambassador (6%), and through a banner or sign (6%).

Figure 2-12: Source of Program Awareness



Isolating program awareness from pledge methods shows that some participants learned about the program prior to pledging, lending credence to the multi-pronged marketing approach utilized by the Energy Ambassador. For example, while a community member might have seen the pledge information at a community event, they may not have been motivated to pledge until the program touched them through another means, such as the School Energy Competition. Survey results showed that the majority of respondents (71%) first heard about the program through a means other than how they pledged. For example, 35% of participants who pledged through the School Energy Competition first heard about the program through another means. Table 2-4 shows sources of program awareness by which a participant pledged. The three most common other sources of awareness, other than pledge method, included the Burlington Standard Press, a conversation with the Energy Ambassador, and a program banner or sign.

Table 2-4: Source of Program Awareness Other Than How Participant Pledged

Sources of Program Awareness other than Pledge Method	Home Energy Makeover Contestant (n=10)	Pledge Card (n=54)	School Energy Competition (n=117)	Website (n=3)
My child brought home materials from school	0%	0%	65%	0%
Program banner or sign	10%	6%	4%	33%
Friend, family member, neighbor, or co-worker	10%	0%	4%	33%
The Burlington Standard Press	30%	9%	5%	0%
Hi-Liter Shopping Guide	10%	0%	0%	33%
Community event	0%	32%	5%	0%
The Home Energy Makeover Contest	20%	0%	6%	0%
City of Burlington	10%	9%	0%	0%
Energy Ambassador visited home or workplace	0%	13%	0%	0%
Other	0%	9%	0%	0%
Way to Save Website	0%	0%	1%	0%

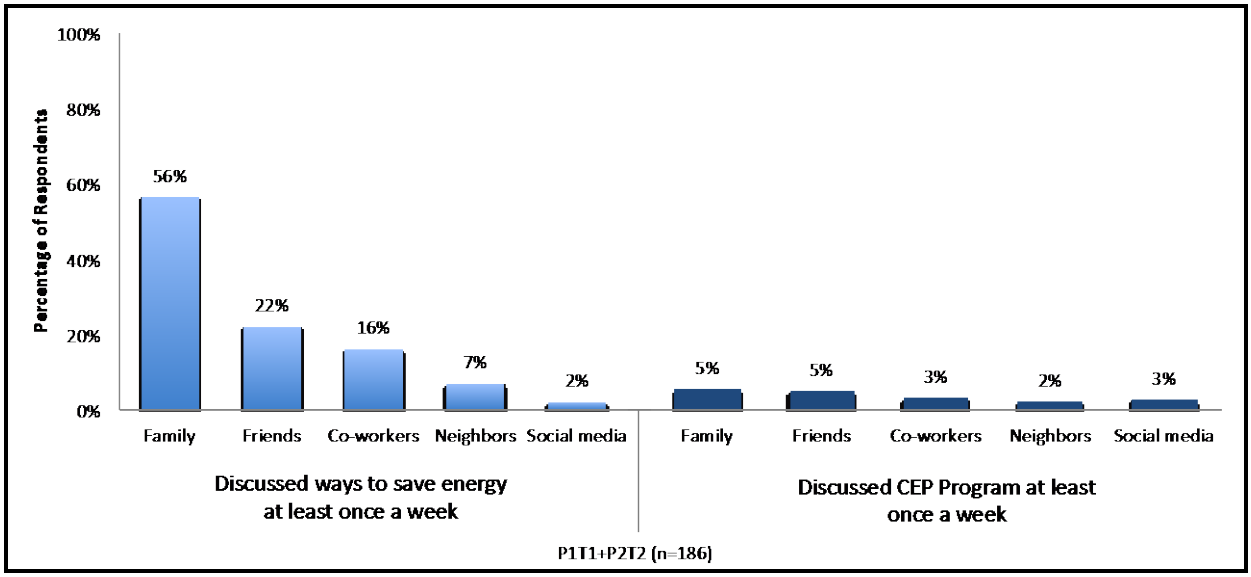
Note: Grey cells indicate that the source of awareness came directly from the pledge method.

In addition to marketing efforts implemented by the Energy Ambassador, program implementers expressed hope that participating community members would help distribute information about the program and about energy efficiency to their peers. As shown in Figure 2-13, the evaluation team found that this occurred, but to a limited extent, especially for communications about the program. Compared to communications about the program, more respondents tended to talk about ways to save energy. Respondents were significantly more likely to talk to family members about ways to save energy compared to any other group ($p < 0.01$).

Family discussions about ways to save energy increased 8% between Time 1 and Time 2, perhaps because the School Energy Competition specifically prompted children to discuss ways to save energy with their families.[11] There was very limited discussion about the CEP Program itself, even among family members.

[11] Differences over time are not shown in Figure 2-13 because the overall percentages were small, and differences over time would not be apparent.

Figure 2-13: Social Outlets that Participants Engaged on at Least a Weekly Basis



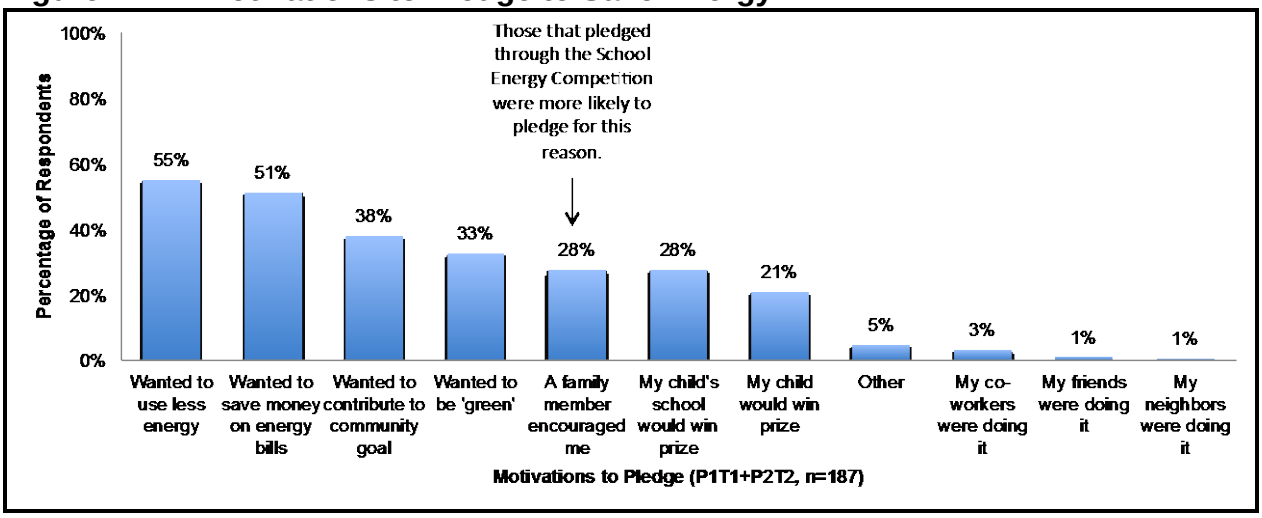
The evaluation team also examined whether conversations about ways to save energy or the program itself increased or decreased over time. This analysis showed that these levels of conversation did not change significantly over time. The evaluation team also examined if frequency of communication varied based on how participants pledged but only found one statistical difference: those who pledged via the School Energy Competition were more likely (65%) to have communicated about ways to save energy with anyone at least once per week, compared to those who pledged through any other method (50%) (X^2 (1, 187)= 4.062, $p < .05$). This is expected, because the School Energy Competition relied on frequent conversations about energy savings.

Motivations to Pledging

In addition to examining marketing and outreach channels, the evaluation team also explored motivations to pledge to save energy. Surveyed participants reported a variety of motivations for pledging. The three most common responses were to use less energy, to save money on energy bills, and to contribute to the community goal. While the first two motivators are common to most energy efficiency programs, contributing to the community goal is unique to this type of program. As shown in Figure 2-14 other motivators included family member encouragement and competition. Community networks other than family—co-workers, friends, and neighbors—were not common motivators in the CEP Program. The evaluation team tested to see if any motivations differed based on pledge method and found respondents that pledged through the School Energy Competition were significantly more motivated to pledge because a family member encouraged them compared to respondents who pledged through other methods (44% of

School Energy Competition pledgees compared to 2% or less for all the other methods). This finding was statistically significant (X^2 (4, n = 187) 38.802, p < .001).[12]

Figure 2-14: Motivations to Pledge to Save Energy



Experiences with Specific Program Activities

In each phase of the panel study, the evaluation team asked participant respondents about experiences they had with specific program activities assessed by this evaluation. First, this section presents the types of information respondents gained through each activity. Next, findings are presented related to particular program activities as they occurred chronologically: community events, the Home Energy Makeover Contest, the School Energy Competition, the True Value discounts, and the Facebook competition.

First, since the majority of program interactions focused on distributing information about the program and energy efficiency opportunities to the Burlington community, the evaluation team asked respondents about what they had learned through their interactions with the program. Table 2-5 shows the types of information that respondents recalled receiving from the program. The most common topics identified by respondents were general information about energy conservation and information about the program.

12 The evaluation team also identified three marginally significant findings (where 0.05 < p < 0.10). Respondents who pledged through a community event were marginally significantly more likely to report that they were motivated to contribute to the community goal (X2 (4, n = 187) 9.307, p = 0.054) and because they wanted to be green (X2 (4, n = 187) 8.549, p = 0.073). Respondents who pledged through the Home Energy Makeover Contest were marginally significantly more motivated to pledge because their friends were doing it (X2 (4, n = 187) 8.237, p = 0.083).

Table 2-5: Respondents' Recall of Information Provided by Various Program Activities

Topic	Program Activities						
	Community Booth (n=142)	**Website (n=117)**	**Electronic Newsletter (n=72)**	**Meeting with Energy Ambassador (n=70)**	**Facebook Page/ Posts (n=50)**	**Workshops (n=5)**	**Twitter (n=1)**
General tips on energy conservation	X	X	X	X	X	X	X
Program Info	X	X	X	X	X		X
Focus/ We Energies Incentives	X	X		X	X	X	
Focus Assessments/ EE Audits		X	X	X		X	
Energy Efficiency Equipment	X	X		X			
Information on free assistance	X		X		X		
Home Energy Competition Rules & Tracking		X		X			
School Energy Competition				X	X		
Pledge Forms	X	X					
Renewables						X	
Information on water conservation	X						
General: Pamphlets/ Brochures/ Literature/ Handouts	X						
Information on purchasing equipment at local stores		X					
Information on engaging others in program				X			
Event Info					X		

At the time 4 survey, 11 respondents also provided feedback on additional information they would want presented through the program (Table 2-6). The majority of the requested information centered around additional information on energy efficiency measures and opportunities.

Table 2-6: Additional Information Requested by Respondents

What additional information do you want?	Frequency (n=11) [a]	
Provide more information on ways to save	10	59%
More outreach and communications to make people more aware of the program	4	24%
Provide more information about available programs	3	18%

a. Free response; multiple responses permitted.

The first major activity that occurred through the program was for the Energy Ambassador to operate booths at community events. This has occurred throughout the program cycle and remains a common way to reach out to community members. Program implementers did not have comprehensive quantitative tracking data to know how many pledges were brought in from unique community events that occurred. In order to understand this better, the evaluation team asked respondents who interacted with the program at a community event to report which event they attended. Table 2-7 shows that the majority of respondents interacted with the program at the farmers market. Other respondents frequently interacted with the program at the Home Expo, a Burlington Block Party, or some type of sporting event.

Table 2-7: Respondent Attendance at Community Events

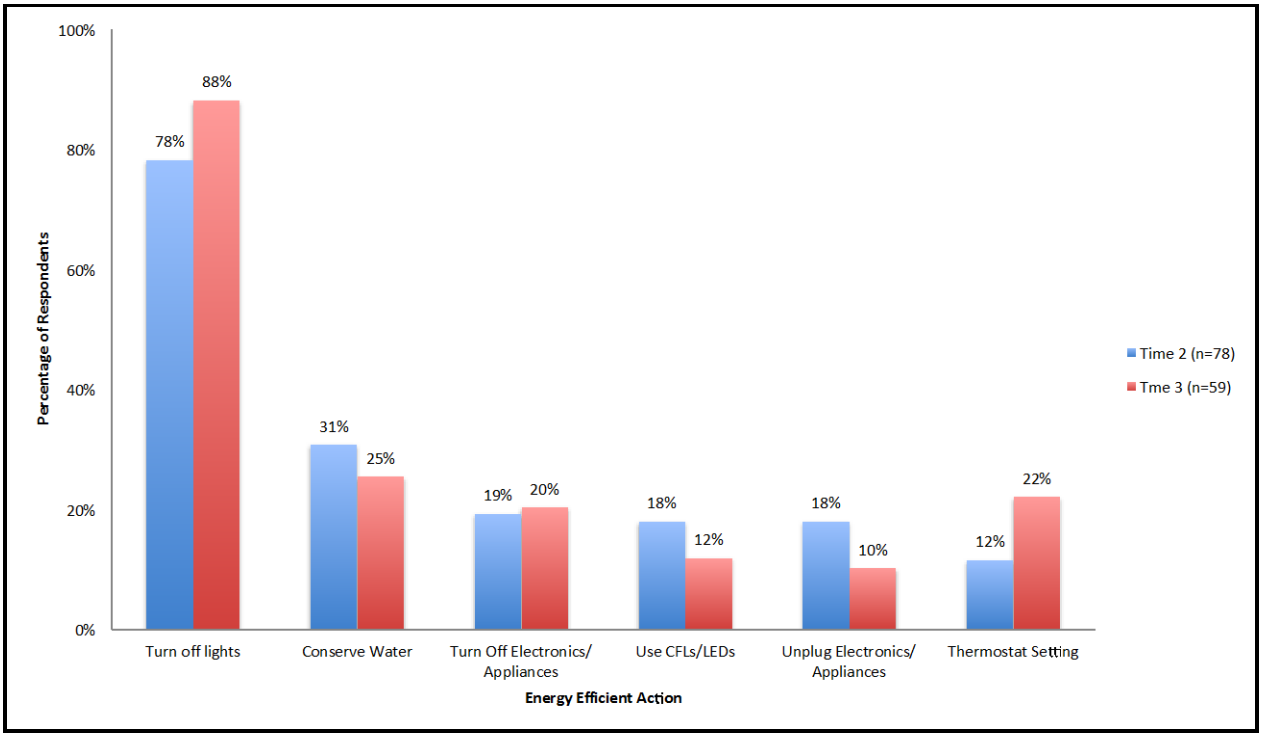
Community Event	Time 1 (n=35) [a]	Time 2 (n=48) [a]	Time 3 (n=49) [a]	Time 4 (n=35) [a]	Total (n=174) [a]	
Farmer's Market	26	20	31	15	92	53%
Home Expo	4	23	5	15	47	27%
Burlington Block Party			8	2	10	6%
Basketball/athletic event	1	3	2		6	3%
Chocolate Fest	1		2	1	4	2%
Band/Orchestra/Choir Concert	3				3	2%
Schools	1		1	1	3	2%
Hardware store			2		2	1%
Retail supercenter			2	1	3	2%
Banner			1		1	1%
Nestle Fair		1			1	1%
Kick Off Event		1			1	1%
Library Book Sale		1			1	1%

a. Multiple responses allowed.

The next major activity implemented through the CEP Program was the Home Energy Makeover Contest. In general, participants were satisfied with their experience with the competition (see the next section on "Satisfaction and Usefulness" for more information on satisfaction). They reported that they were informed of contest rules and that they generally understood the rules. Three respondents reported minor challenges specific to the Home Energy Makeover Contest. One respondent said he/she glossed over the rules and found that the deadlines were not obvious. Another respondent said they did not know they needed to submit a video. The third respondent said that while they thought the rules were clear, they thought it was unclear how the final eight contestants were chosen.

Chronologically, the next major activity was the School Energy Competition. The competition relied on students to go home and ask their caregivers to sign a pledge to save energy. Program implementers did not know how or if students actually talked to their caregivers about the competition or about ways to save energy. As a result, the evaluation team asked those respondents who reported having a child bring home a pledge form from their school about their experiences. Two respondents reported not pledging through the School Energy Competition because they had either already pledged through another means or because they felt they were already energy efficient. Of the respondents who participated in the School Energy Competition, 79% of them recalled speaking to the child about the pledge. Over half of them (58%) also reported that the child explained the School Energy Competition and the same number (58%) also reported that the child had explained the individual drawing for an iPad. A large majority (74%) of the respondents reported that their child had encouraged them to conduct energy-saving actions since signing the pledge. The percentage of respondents (80%) who talked to their children about energy-saving actions remained high six months after the School Energy Competition, and the ways in which their children encouraged household members to save energy tended to be similar to those from when they first participated in the School Energy Competition. Figure 2-15 shows the various actions that children encouraged their caregivers to take, as reported during the time 2 and time 3 surveys. The most common form of encouragement from children tended to be reminders to turn off the lights.

Figure 2-15: Students' Reminders to their Caregivers to take Action



Following the School Energy Competition, the Energy Ambassador launched a discount program with Burlington's local True Value store, whereby the store offered additional discounts on energy and water efficient measures if shoppers signed a pledge form. To better understand participant experiences with the True Value discounts, the evaluation team also asked participants about their awareness of the financial discounts offered though the True Value store. Because these discounts were first offered in May 2012, the evaluation team focused this analysis on respondents who completed the second survey. Of those respondents, 40% were aware of the discounts. This is relatively high, considering that 50% of the respondents from the second survey were aware of the Focus on Energy incentives even though those incentives have been offered and marketed for a number of years. Respondents mostly learned about the True Value discounts through information provided by the program (Table 2-8). Interestingly, employees of True Value played a very minor role in informing respondents about the discount according to these results. The Energy Ambassador confirmed that employees were not incentivized to sell the discounts to their customers, which he claimed resulted in fewer than expected pledgees through this channel.

Table 2-8: Awareness of True Value Financial Discounts

Source of Awareness	Awareness of True Value Discounts (n=63)
Promotional materials inside the True Value Store	27%
Burlington Standard Press/ Hi-Liter Shopping Guide	14%
Community event	10%
Energy Ambassador	9%
Way to Save Website	8%
Information from Child's School	6%
True Value circular ad	6%
Other [a]	6%
True Value employee	5%
Facebook	5%

a. Other includes the following individual responses: "from a vendor," "MREA," "purchased hot water heater," and "we are an HVAC company." It is unclear whether the program had any influence over these responses.

During the summer of 2012 the Energy Ambassador ran a competition to encourage community members to "like" the *Way to Save, Burlington!* Facebook page. The third survey, therefore, included a few questions targeting this effort. Twelve respondents said they had liked the Facebook page and two indicated they did so because of the competition. Nine of the twelve respondents said they had actually told their friends or family about the Facebook page. All twelve said that they read the Facebook posts and six of them reported to have shared a Facebook post with a friend or family.

Finally, during the fall of 2012, the Energy Ambassador participated in corporate fairs at Nestle and Veralia that focused on environmental and energy issues. However, because there were only three commercial and one mixed survey respondent left in the sample after the time 3 survey, the time 4 survey did not ask specifically about these activities.

Respondents also had an opportunity to identify any challenges they experienced while participating in the program and responded with only a limited number of challenges:

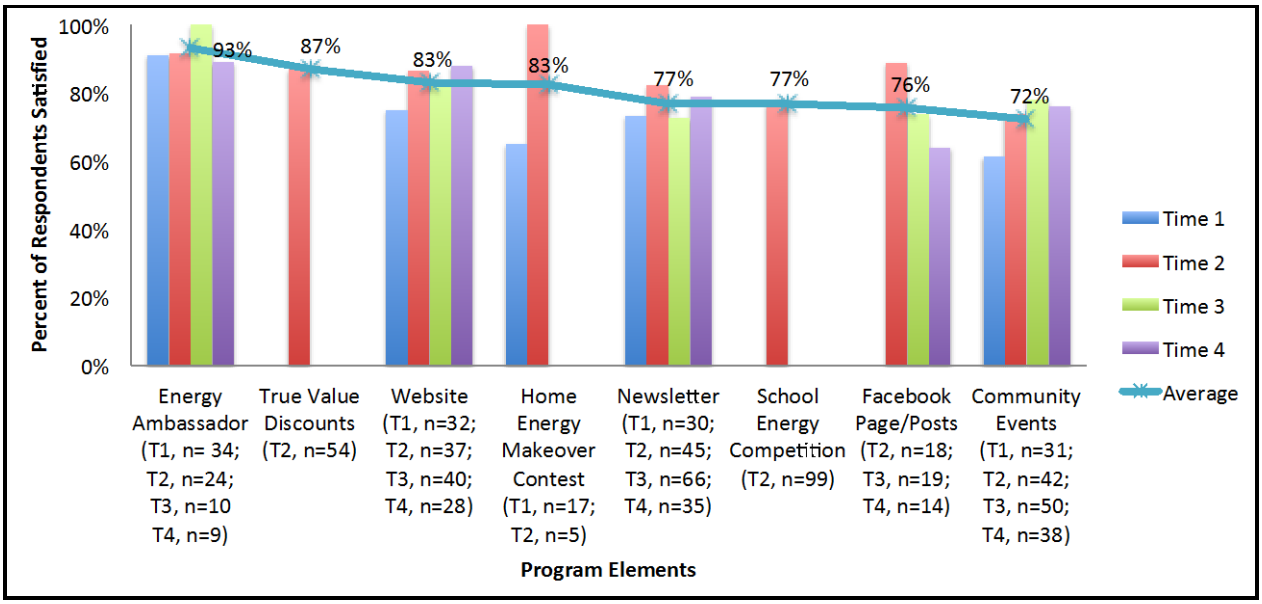
- Two respondents thought "the application" required too much information/or the questions were confusing. It was unclear what application these respondents were referring to, but presumably they were describing the application for the Home Energy Makeover Contest.
- One respondent mentioned they had challenges printing out a pledge after completing one online.
- One respondent wanted to return the pledge form via email and had trouble doing that.

Satisfaction with and Usefulness of Program Activities

The evaluation team asked participants to rate their satisfaction with program activities with which they interacted and also rate how useful they perceived those activities to be. This information is important to understand the success of various activities from the point of view of the participants.

As shown in Figure 2-16, participants were satisfied with all aspects of the program. Although there was some variability, participants generally sustained these levels of satisfaction over time. On average, participants were most satisfied with the Energy Ambassador, the True Value discounts, the website, and the Home Energy Makeover Contest.

Figure 2-16: Satisfaction with Program Activities

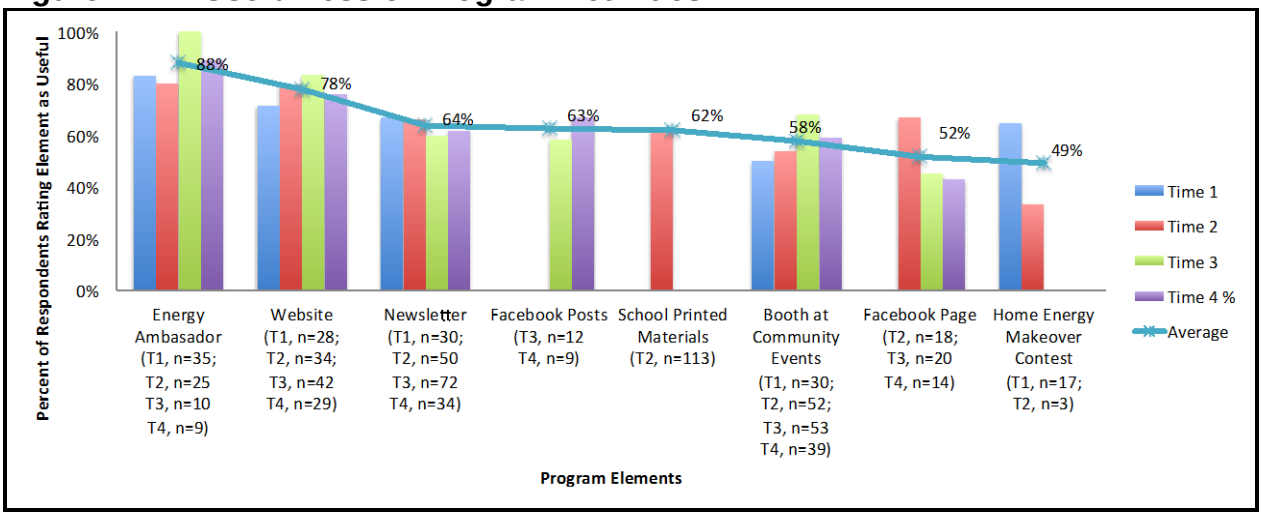


Note. Data in this figure indicate the percent of participants who rated each component as a 4 or 5 on a scale of 1 to 5, 1 being "not at all satisfied", 5 being "very satisfied," and 3 being "neutral." Sample sizes are slightly different from those shown in Figure 2-17 due to some respondents who skipped questions or responded with "Don't know."

These data do not include program activities where sample size was less than 5 at all four times the survey was conducted. One respondent in Time 2, Time 3, and Time 4 reported interacting with the Twitter feed, scoring satisfaction at 100% for Time 2 and Time 3, and 0% for Time 4. In addition, three respondents reported attending an energy efficiency workshop at Time 1 and at Time 2. All three reported satisfaction at both time points.

To examine program satisfaction through a slightly different lens, the evaluation team also surveyed participant respondents about the usefulness of different marketing and outreach efforts. Figure 2-17 shows that respondents most frequently scored their interactions with the Energy Ambassador and the website as useful. Fewer respondents viewed the Home Energy Makeover Contest and the Facebook page as useful.

Figure 2-17: Usefulness of Program Activities



Note. Data in this figure indicate the percent of participants who rated each component as a 4 or 5 on a scale of 1 to 5, 1 being "not at all satisfied," 5 being "very satisfied," and 3 being "neutral." Sample sizes are slightly different from those shown in Figure 2-16 due to some respondents who skipped questions or responded with "Don't know."

These data do not include program activities where sample size was less than 5 at all three times the survey was conducted. Three respondents reported to have attended an energy efficiency workshop at Time 1 and at Time 2. In both situations, all three reported the workshop as being useful at both time points. One respondent at Time 2, Time 3, and Time 4 reported interacting with the Twitter feed. At Times 2 and 4, the respondent did not report Twitter as being useful, but the respondent at Time 3 did report Twitter as being useful.

"Facebook Posts" refer to updates viewed in a participant's news feed if they have "Liked" the program's Facebook page. Respondents were asked about the Facebook page if they have ever viewed the page. They were asked about Facebook posts if they have "Liked" the page and have read the Facebook posts in their news feed.

The survey asked open-ended follow-up questions to respondents who rated the Twitter or Facebook page. Those who rated the services as "Not useful" (1 or 2 on a 5-point scale) were asked if there was anything that they would like to see changed to make the services more useful, and those who rated the services as "Very useful" (4 or 5 on a 5-point scale) were asked what they found to be most useful. However, only a few respondents chose to leave feedback on these specific questions, so no findings are reported.

2.4.4 Program Influence

To better understand what influence program participation has had on energy efficiency behaviors, the evaluation team asked survey participants which energy efficiency actions they had taken since participating in the program. The evaluation team also compared the average number of actions taken by participant types to understand if some program efforts were able to drive more energy-saving actions. Additionally, the evaluation team also asked participants about their motivations and barriers to completing energy efficiency actions.

Types of Actions Taken

The most common energy-saving actions participant respondents reported taking at the time of the first survey were no- and low-cost actions. As shown in Figure 2-18, four of the top five

actions reported by respondents were no-cost actions: switching lighting or electronics on/off, changing thermostat settings, and using a clothesline instead of a dryer.

Figure 2-18: Most Common Energy-Saving Actions

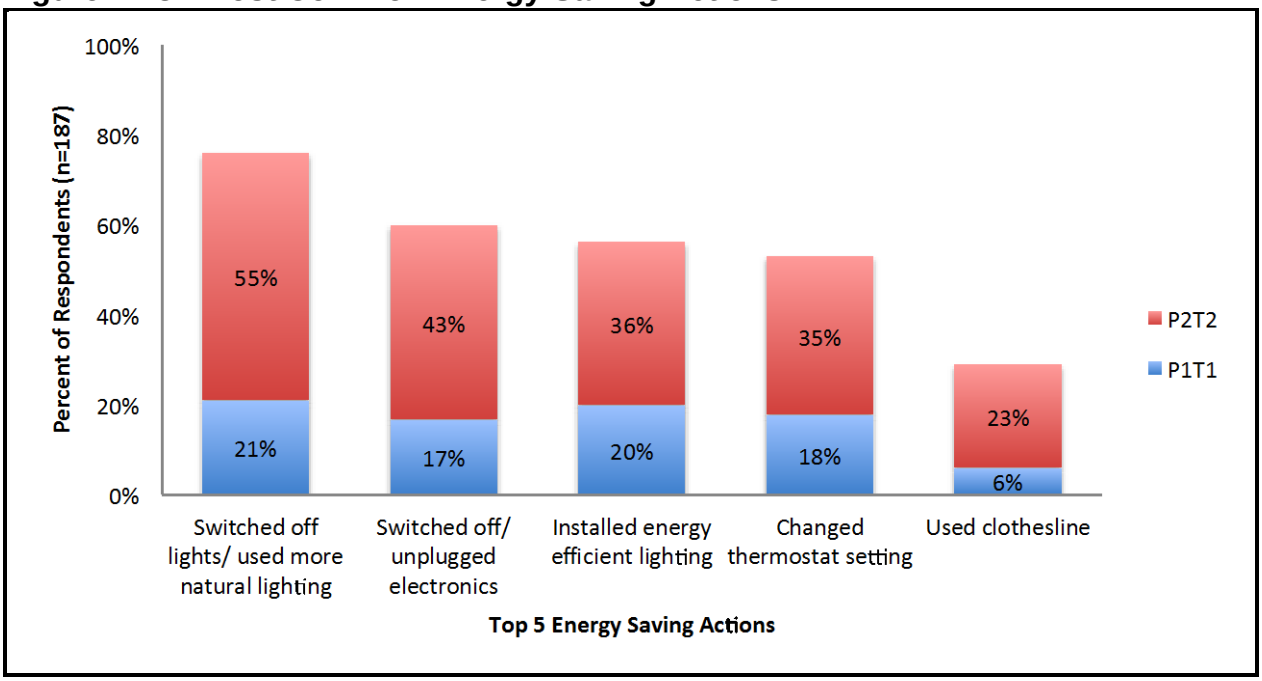
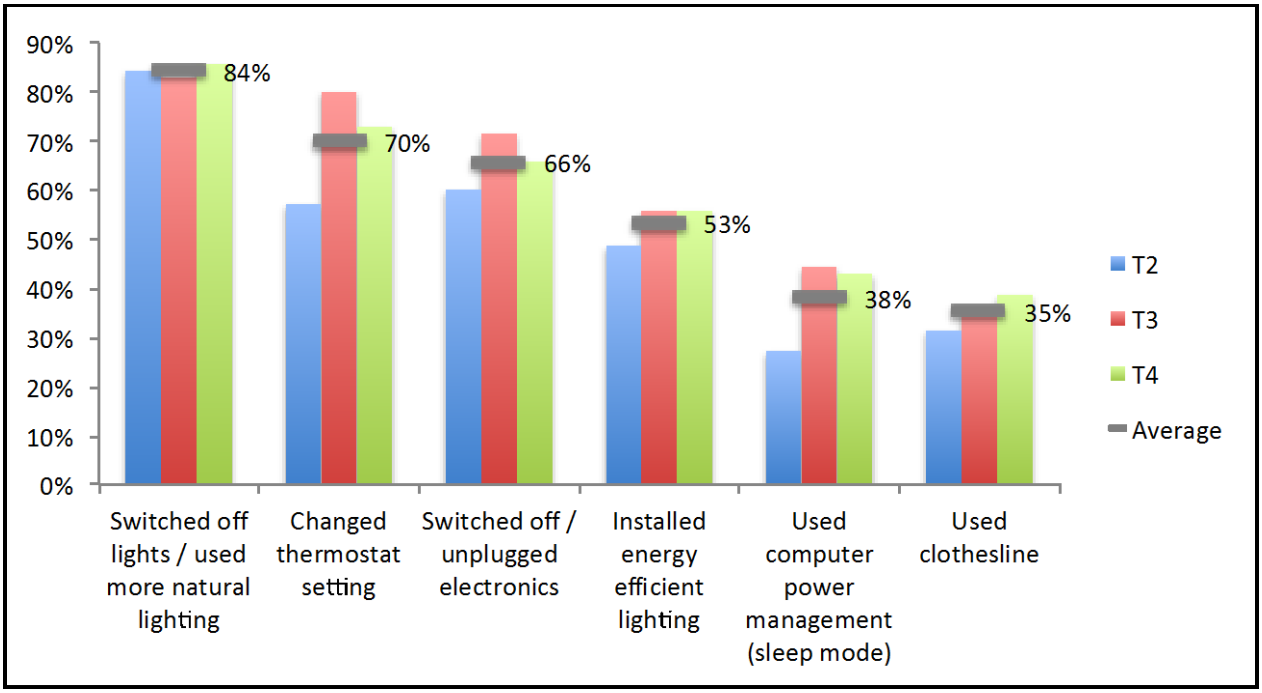


Figure 2-19 shows the top energy-saving actions reported over time, for only P2 participant respondents who completed the survey at time 4 (the P1 sample is not shown because the sample size was quite small at time 4). The most common actions are very similar to those at the first survey, shown in Figure 2-18. However, unlike the first survey, the data at time 4 show that using computer power management was among the top actions completed.

The evaluation team tested whether the types of actions taken by participants changed over time and found two significant differences. The number of P2 respondents reporting that they changed their thermostat settings to save energy increased significantly from 57% at time 2 to 80% at time 3 and 73% at time 4. The number of respondents who reported using sleep mode on their computer also increased significantly from 27% at time 2 to 44% at time 3 and 43% at time 4.[13] Respondents did not significantly change the frequency of any other energy-saving activities.

13 A McNemar X2 test showed that these changes from time 2 were statistically significant at $p < .05$.

Figure 2-19: Top Energy-Saving Actions Over Time among P2 Sample



The evaluation team also tested whether pledge type was related to the types of behavior changes conducted. To test this, the evaluation team collapsed pledge methods into three categories to ensure large enough sample sizes for statistical testing. The three pledge methods assessed were: respondents who pledged through the School Energy Competition (n = 117), those who pledged through a community event (n = 54), and "other" (n = 16), which included pledging through the website, the Home Energy Makeover Contest, or through an unknown mean. Based on these three categories, the evaluation team found that respondents who pledged through the School Energy Competition were more likely to switch off lights compared to the other respondents ($X^2(2, n = 187) = 8.44$, $p = 0.012$). This could be due to the fact that students most commonly reminded their caregivers to turn off lights (See Figure 2-15).[14]

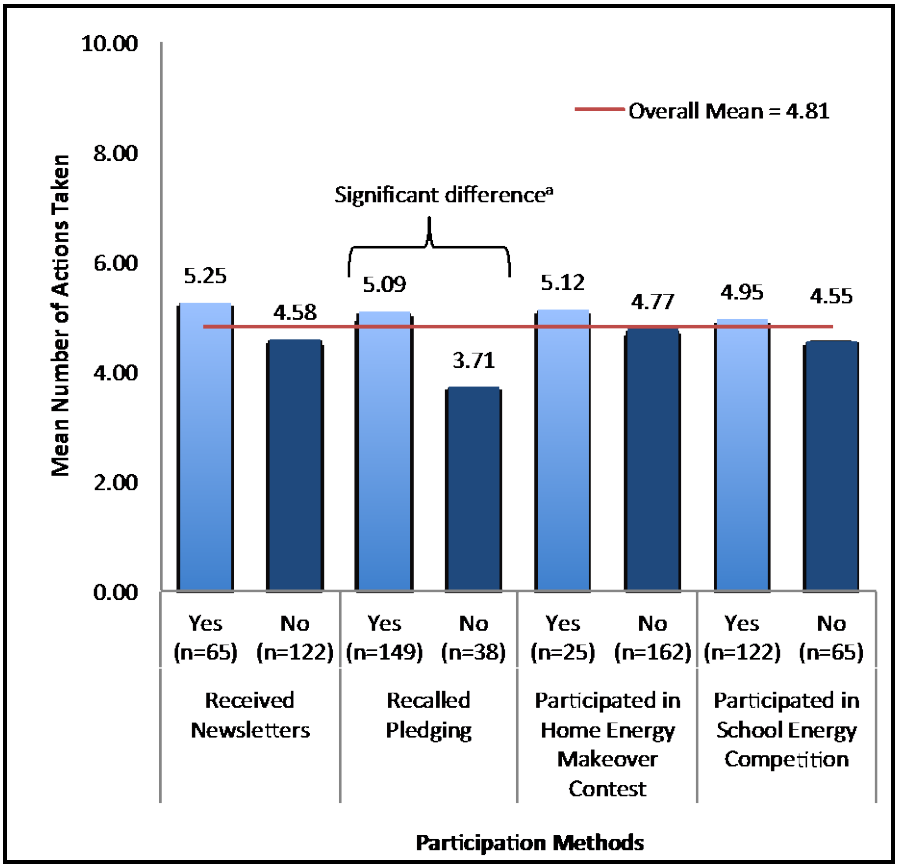
Number of Actions Taken

Program engagement methods (i.e., contests, pledges) may have some effect on the energy efficiency actions implemented by a participant. The evaluation team examined the average number of actions taken by surveyed participants, and found that those who recalled pledging to take action, on average, implemented more energy efficiency measures in their home or business than those that did not (see Figure 2-21), and this difference was statistically significant ($t(185) = 2.74$, $p < .007$). Similarly, those respondents who participated in a contest or recalled receiving

[14] The evaluation team also found that participants who pledged through a community event were more likely to report installing energy efficient light bulbs compared to other pledgees, but this difference was only marginally statistically significant ($x^2(2, n = 187) = 5.120$, $p = 0.08$).

the newsletter reported taking more energy-saving actions than those who did not, although these differences were not statistically significant.

Figure 2-20: Mean Number of Energy-Saving Actions Taken by Participation Methods



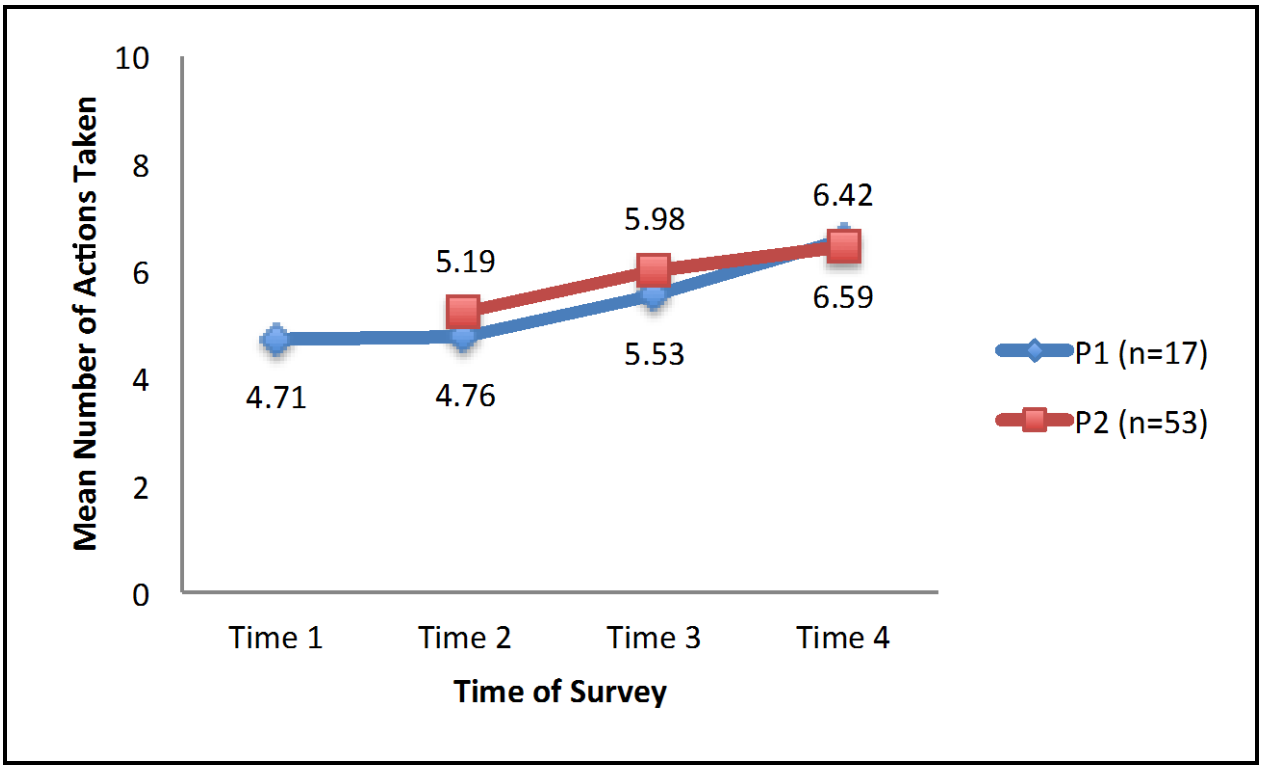
a. $t(185) = 2.74$, $p < .007$

The evaluation team assessed whether respondents sustained these actions over time. According to the four surveys, participants increased the number of actions taken over time. This occurred over a one-year and eighteen-month time frame (see Figure 2-21). The first group of respondents (P1) reported nearly the same number of actions in the first six months following pledging (4.71 at time 1 and 4.76 at time 2), but had increased their mean number of actions by two (6.59 at time 4) one year later.[15]

[15] The evaluation team found an increase in the mean number of actions (0.71) between P1T1 and P1T2 when assessing the entire sample group that completed both surveys (n = 28); however, results showed no significant difference in the number of actions when examining the sample group that took all three surveys (n = 21) or all four surveys (n = 17). However, with the sample group that took three surveys, a repeated-measures ANOVA showed that this change was marginally statistically significant over time ($F(2,40) = 2.76$, $p = .075$) A post-hoc test showed that the marginally significant difference was between Time 2 and Time 3 ($p = .099$).

The second group of respondents (P2), which consisted primarily of the respondents who pledged through the School Energy Competition, increased their actions by one (1.23) over the course of one year after pledging. A repeated measures ANOVA showed that these results were statistically significant ($F(2, 51) = 4.85$, $p < .05$), specifically for the increase between time 2 ($M = 5.19$) and time 4 ($M = 6.42$, $p < .01$). It is unclear how these actions will sustain over time without conducting follow-up surveys.

Figure 2-21: Mean Number of Actions Taken Over Time



Motivations and Barriers to Take Action

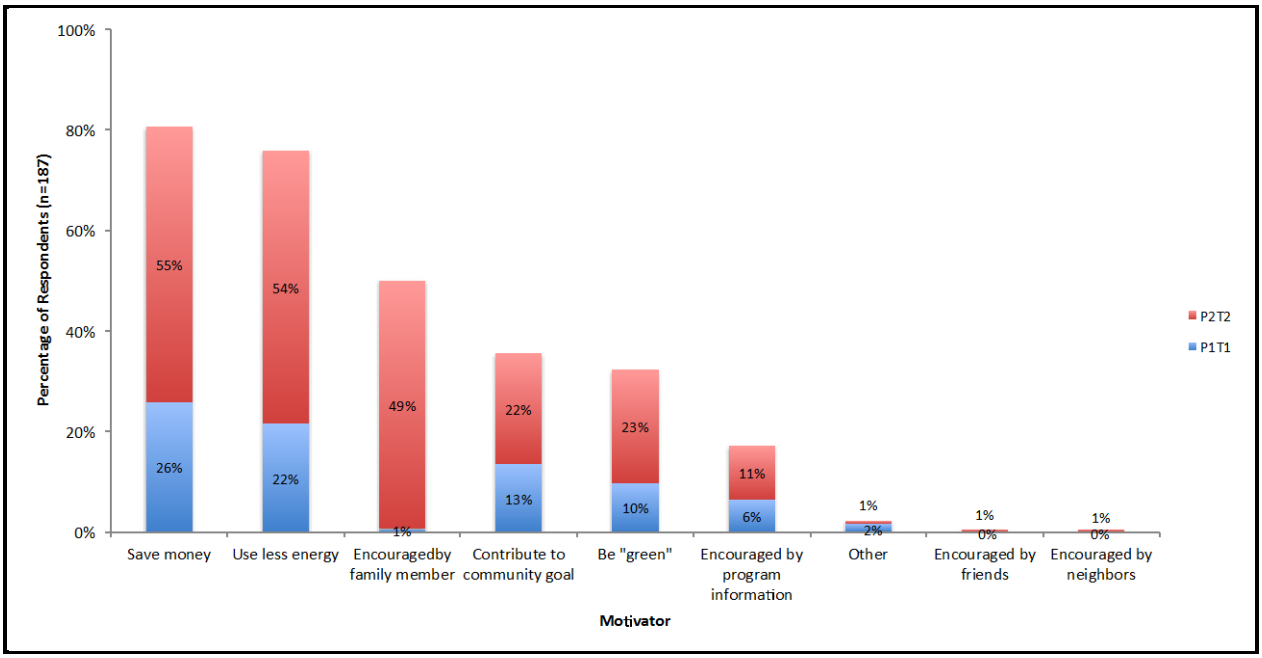
Participant respondents were motivated to take energy-saving actions for a variety of reasons, the most common of which were to save money or to use less energy (Figure 2-22). However, other important motivators were related specifically to the program: encouragement from a family member, contribution to a community goal, and encouragement from information distributed through the program. As shown in Figure 2-22, the respondents who reported being encouraged to take action by a family member were nearly entirely from the second sample population (P2), which was mostly made up of participants in the School Energy Competition.

For the most part, motivators did not change significantly over time; however, the second sample group (P2) did report some motivational changes over time. This sample group reported being more motivated by program information, the community goal, saving money, and feedback from

a child compared over time (P2T3 compared to P2T2).[16] It is unclear why these motivational changes would have occurred.

The P2 sample group also showed a marginally significant (p = .057) decrease in being motivated by a child in their family between time 3 and time 4. This change makes sense, since at time 4, more time had elapsed since the School Energy Competition.

Figure 2-22: Motivators to Conduct Energy-Saving Actions

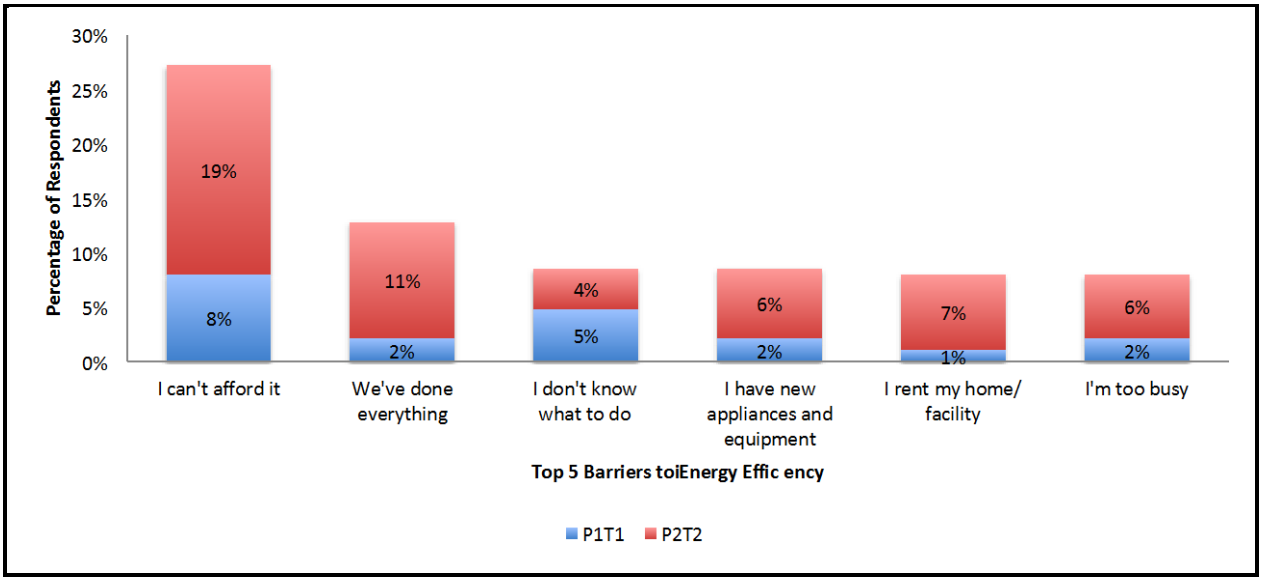


The evaluation team also asked survey participants about barriers to taking energy-saving actions. As shown in Figure 2-23, respondents indicated that the primary barrier to taking energy-saving actions was a lack of funds. Other reasons were more dispersed but represented barriers related to not knowing what else they could do, not owning their facility, or not prioritizing energy efficiency. In addition to the barriers listed, 24% of respondents indicated that they could not identify any specific barriers to implementing additional energy efficiency action ("no reason"); they just did not take energy-saving actions. The evaluation team tested whether these barriers decreased over time and found no significant results.[17]

[16] These findings were all significant at the $p < 0.05$ level.

[17] This was true even at $p \leq 0.1$ for all sample groups at times T1, T2, and T3. This was also true for the Phase 2 sample group at T4. The evaluation team was unable to test the Phase 1 sample group at T4 due to sample size limitations.

Figure 2-23: Top 5 Barriers to Taking More Energy-Saving Actions



At the time of the final survey, we asked residential participants if there were any barriers or challenges that prevented them from reducing their energy use at home. Table 2-9 shows their coded free-response answers. These responses confirmed that, even at time 4, cost remained a substantial barrier to energy efficiency. In this open-ended question format, 43% of respondents reported cost as a barrier; no other reason was reported by more than 10%. The next most common barriers were the perceptions that saving energy takes too much time (9%), family members are resistant to saving energy (9%), or that saving energy takes too much effort (7%).

Table 2-9: Challenges to Saving Energy at Home as of Time 4

Challenges to Saving Energy at Home	Percent of Respondents (n=69) [a]
Energy efficiency improvements are unaffordable	43%
Saving energy takes too much time	9%
Not all family members are on board with saving energy	9%
Energy savings require too much effort or are too complex	7%
The residence is rented, not owned	6%
Lack of knowledge about what to do	6%
The construction of the home makes it difficult to save energy	4%
Our health limits our ability to save on heating or cooling	4%
It is difficult to remember to take action	3%
Energy efficient light bulbs do not last very long	1%

a. Multiple responses allowed

Influence of Pledge Recall

The evaluation team found that a participant's ability to recall their pledge positively influenced a respondent to take energy-saving actions. To complete this analysis, the evaluation team examined recall and then compared the respondents' ability to recall with whether they took action on their pledge. First, the evaluation team found high variability in respondents' ability to recall their pledge (see Table 2-10); however, respondents most frequently (31%) recalled their pledge perfectly (1.00). Respondents were placed into a "High Recall" or "Low Recall" group based on the proportion of pledged actions that they recalled pledging. If they recalled 50% or less of their pledged actions, they were placed in the "Low Recall group; if they recalled more than 50% of their pledged actions, they were placed in the "High Recall" group.

Table 2-10: Proportion of Pledge Recalled Correctly

Proportion of Pledge Recalled Correctly			Percentage of Respondents (n = 103)[a]
High Recall Group (n=73)	(perfect recall)	1.00	31%
		.80	19%
		.75	6%
		.67	1%
		.60	14%
Low Recall Group(n=30)		.50	7%
		.40	4%
		.33	6%
		.20	1%
	(no recall)	0.00	12%

Sample size for this question was based on P1T2 (n = 28) and P2T3 (n = 107), representing respondents' recall six-months prior to their initial survey for both P1 and P2 groups. Program data was missing pledge responses for four respondents and so these respondents were not included in this particular analysis.

Next, the evaluation team checked to see if respondents actually completed their pledged actions; the evaluation team examined the actions that respondents reported taking as a proportion of the actions that they had pledged to take. The evaluation team gave credit to respondents for completing an action at any point; in other words persistence of behaviors was not critical to this particular test since some pledges were based on installing equipment and not long-term behavior changes. Table 2-11 shows that by time 4, 41% of respondents indicated they took all of the actions they had pledged to take.

Table 2-11: Proportion of Pledged Actions Performed as of Time 4

Proportion of Pledged Actions Performed		Percentage of Respondents (n=68)[a]
(All pledged actions taken)	1.00	41%
↑	0.80	28%
	0.75	10%
	0.67	6%
	0.60	13%
↓	0.40	2%
(No pledged actions taken)	0.00	0%

Sample size for this question was based on P2T4 respondents (n = 70). The program database was missing pledge responses for two respondents, and so these respondents were not included in this particular analysis.

Finally, the evaluation team compared the proportion of actions taken for the defined "Low Recall" and "High Recall" groups and found that the high recall respondents had a significantly higher proportion of pledged actions taken (0.80 compared to 0.67). This finding was statistically significant ($t(101) = 2.44$ $p = 0.02$). Based on these results, it is possible that more energy savings could be achieved if program implementers provided some type of pledge reminder. Despite these results, only a third (32%) of participants reported wanting to have some sort of reminder of their pledge. The most common requested reminders were email reminders and refrigerator magnet reminders (Table 2-12).

Table 2-12: Requested Format for Pledge Reminder

Formats of Pledge Reminder	Percentage of Respondents (n=32)
Email reminder	47%
Refrigerator magnet	38%
Postcard reminder	6%
Poster to hang on the wall	6%
Paper copy of my pledge form	3%

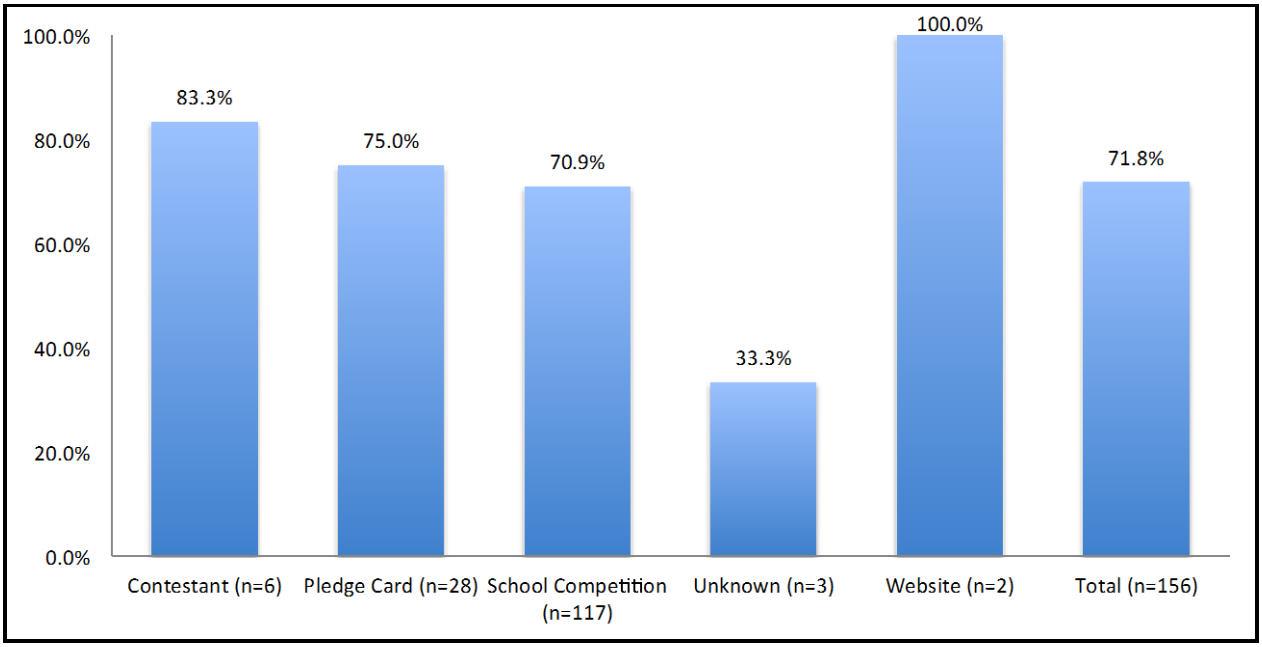
2.4.5 Awareness and Participation in Focus on Energy Programs

This section summarizes findings regarding participants' awareness of the organization, Focus on Energy, as well as specific awareness of programs offered by Focus on Energy. Finally, participation in Focus on Energy programs by CEP participants is reported.

Participant Awareness of Focus on Energy

The evaluation team asked participant respondents whether they were aware of Focus on Energy. The evaluation team only asked this question during the second survey. As shown in Figure 2-24, 72% of program respondents were aware of Focus on Energy. This level of awareness was fairly similar across the three main categories of pledge methods: the Home Energy Makeover Contest, pledge cards, and the School Energy Competition. Awareness was markedly higher than that reported by the community-wide baseline respondents (35%). The evaluation team cannot claim that the program necessarily caused participants to become more aware of Focus on Energy because it is possible that people familiar with Focus on Energy were also more likely to participate in the program. However, the evaluation team also asked participants where they first heard about rebates from Focus on Energy, and some responses (28%) identified sources promoted or generated by the CEP Program: a community event, the Energy Ambassador, or articles in the local newspapers.

Figure 2-24: Awareness of Focus on Energy, by Pledge Method



Note: Although the evaluation team found high levels of awareness (100%) among the two participants who reported pledging via the website and lower levels of awareness (33%) among the three participants for whom pledge method was unknown, the sample sizes for these groups were very small.

Participant Awareness of Focus on Energy Programs

With the time 4 survey, the evaluation team further sought to understand the influence of the CEP Program on respondent awareness of and participation in residential programs offered by Focus on Energy. Of residential respondents surveyed at time 4 (n = 69), 74% reported that they had heard of at least one program from Focus on Energy. Table 2-13 shows respondents' awareness of the various programs. The most well-known programs were the Home Performance with ENERGY STAR Program (43% of respondents aware) and the Appliance Recycling Program (41% of respondents aware). The programs with the lowest level of awareness were the Express Energy Efficiency Program (6% of respondents aware) and the New Homes Program (10% of respondents aware).

Table 2-13: Awareness of Focus on Energy Programs

Focus on Energy Program	Percent of Respondents (n=69) [a]
Home Performance with ENERGY STAR Program	43%
Appliance Recycling Program	41%
Renewable Energy	30%
Lighting and Appliance Program	28%
Residential Rewards Program	20%
New Homes Program	10%
Express Energy Efficiency Program	6%

a. Multiple responses allowed

For each program they were aware of, respondents were asked how they learned about the program. Table 2-14 shows responses. For the 51 respondents who reported being aware of at least one Focus on Energy program, the most common sources of awareness were the *Way to Save, Burlington!* website (43%) and word of mouth (41%).

Table 2-14: Source of Focus on Energy Program Awareness

Place Heard	Percent of Aware Respondents (n=51) [a]
Way to Save, Burlington! Website	43%
Word of mouth	41%
Community event	31%
We Energies bill insert	25%
Energy Ambassador	20%
The electronic newsletter for the Way to Save, Burlington! program	20%
We Energies Website	16%
Focus on Energy Website	12%
Radio	6%
Appliance Store	4%
Facebook	4%
The Hi-Liter Shopping Guide	4%
TV	4%
The Burlington Standard Press	2%

a. Multiple responses allowed

Almost a third of survey respondents (30%) reported that they had participated in a program from Focus on Energy. Table 2-15 shows the programs respondents reported participating in. The most commonly reported programs that respondents had participated in were the Lighting and Appliance Program (14%) and the Appliance Recycling Program (9%), while the least commonly reported programs were the Renewable Energy Program (1%) and the Express Energy Efficiency Program (1%).

Table 2-15: Participation in Focus on Energy Programs

Focus on Energy Program	Participating Respondents	Percent of Wave 4 (n=69)[a]
Lighting and Appliance Program	10	14%
Appliance Recycling Program	6	9%
Home Performance with ENERGY STAR Program	5	7%
Residential Rewards Program	4	6%
New Homes Program	2	3%
Express Energy Efficiency Program	1	1%
Renewable Energy	1	1%

a. Multiple responses allowed

To help determine if participants likely participated in Focus of Energy programs due to their participation in the CEP Program, survey respondents were asked what year they had

participated in the Focus on Energy program. Only one respondent indicated that he or she had participated prior to 2010 (when the CEP Program began). The remaining respondents indicated they had participated in Focus on Energy programs in the year 2010 or later, meaning that it was possible that the CEP Program influenced their participation in the Focus on Energy programs in some way.

Table 2-16 shows reasons CEP participants reported for participating in Focus on Energy programs. Most commonly, participants wanted to save money on their utility bills and use less energy. Participants commonly indicated reasons related to the CEP Program, with 62% reporting that they wanted to contribute to the *Way to Save, Burlington!* goal and 38% indicating they wanted to fulfill their pledge.

Table 2-16: Reasons for Participating in Focus on Energy Programs[18]

Reason	Percent of All Participants (n=21)
I wanted to save money on energy bills	90%
I wanted to use less energy	86%
I wanted to contribute to Way to Save, Burlington!	62%
I wanted to be "green"	52%
I wanted to support my child's school pledge	38%
I wanted to fulfill my pledge to save energy	38%
A child in my household encouraged me	29%
Other reason	15%

Note: "Other" reasons include receiving a bill insert for the Renewable Energy program, and encountering the Appliance Recycling program at a hardware store where the customer was purchasing a new appliance.

2.4.6 Respondent Feedback on Program Improvement Opportunities

Respondents were also given an opportunity to identify additional services that they wanted the program to offer (Table 2-17). The most common response was to provide additional incentives or assistance, which the CEP Program has not done specifically since it was relying on Focus on Energy and We Energies programs to serve that purpose. Other common requests were to conduct even more community education and outreach, identify additional ways to save energy, expand the program outside of the City of Burlington, conduct home audits, and identify renewable energy opportunities. Some community members provided more specific information about doing more outreach such as: providing more signs/banners, providing more reminders,

[18] The survey also asked program participants if the CEP program influenced their decision to participate in Focus on Energy programs, but too few respondents answered the question to make any firm conclusions. However, there were a greater number of responses indicating that the CEP Program had influenced their participation in Focus on Energy programs, compared to responses indicating the program had not influenced their participation.

including bill inserts, performing more outreach via traditional media, and performing more community events. In addition to the "services" described in Table 2-17, one respondent said the program could be improved if it offered product endorsements, pursued energy efficiency measures in bulk, and then offered them to community members at discounted rates. Another respondent mentioned holding monthly energy challenges.

Table 2-17: Additional Services Requested by Respondents

Additional Services	Time 1 (n=18)	Time 2 (n=51)	Time 2 (n=28)	Time 4 (n=51)
More rebates/financial assistance/free programs	17%	22%	11%	14%
More community education and outreach	17%	14%	11%	
More ways to save energy	17%	8%		
Program expansion outside Burlington city limits	11%	4%	4%	2%
Home audits	6%	4%	7%	2%
Renewable energy opportunities			11%	
More school engagement		4%	4%	
Use local contractors/preapproved contractors list		4%	4%	
Low income assistance			7%	
Additional information			7%	8%
More contests		6%		
Opportunities for renters			4%	2%
Appliance recycling program			4%	

2.4.7 Key Findings: Participant Perspective

Results from the participant panel study largely support the program theory. The evaluation team found participants were satisfied with program experiences and that various program activities motivated participants to pledge to save energy and actually conduct energy-saving actions. Respondents tended to conduct no- and low-cost energy-saving actions and they reported increasing the number of actions they took over time. Respondents who recalled pledging reported conducting statistically significantly more energy-saving actions than those recipients who had not recalled pledging. While recall was positively related to a greater number of actions taken, the majority of respondents (68%) did not want to receive a reminder of the recall. The time 4 survey revealed that almost three quarters (74%) of participants had heard of at least one Focus on Energy program, and almost one-third (30%) had participated in at least one Focus on Energy program, suggesting that the CEP Program has influenced awareness and participation in Focus on Energy programs.

While the School Energy Competition did drive participants to talk to family members about ways to save energy, communication about ways to save energy and about the program remained low throughout the twelve-month period of investigation. However, word of mouth was the

second most common way of hearing about Focus on Energy programs – suggesting that communications within the community are an effective means of increasing awareness of other programs. The following bullets elaborate on these key findings from the participant panel study. These findings are synthesized with findings from other evaluation tasks to generate overall conclusions and recommendations in Section 2.6.

Participants were largely residential and tended to be more affluent than the general City of Burlington population. The School Energy Competition drove the majority of program participation, and thus the majority of participants tended to be residential. Participants generally reported that they held a college degree, earned between $50,000 to $90,000, and had four people living in their household. These statistics are all greater than those estimated by the US Census for the general City of Burlington population. Additionally, while the CEP Program targets the City of Burlington, 38% of participants reported living outside of the City of Burlington. [19]

Participant attitudes were similar in comparison to the general Burlington population but participants were more aware of incentives offered through Focus on Energy as compared to the general population. Overall, residential attitudes tended to be similar to those found in the general Burlington population, but participants were more likely to report that they could reduce energy use in their house and were less likely to report that they had the right to use as much energy as they wanted. Participants also reported to be more aware of Focus on Energy incentives compared to the general Burlington population (72% compared to 35%). While it is unclear whether all of this increased awareness is directly attributable to the program, 28% of the respondents reported first learning about Focus on Energy incentives through CEP Program-related activities.

The multi-marketing approach was successful. According to survey results, 71% of respondents first heard about the program prior to pledging. Respondents reported first learning about the program a variety of sources. The three most common sources of program awareness accounted for 61% of the responses and included: the School Energy Competition (41%), a community event (13%), or the Burlington Standard Press (7%). While program-driven marketing techniques were common sources of awareness, peer-to-peer marketing of the CEP Program was less common (5%).

Participants were motivated to pledge partially due to program-related motivators. While participants were motivated to pledge because they wanted to use less energy or save money, they were also motivated due to a variety of program-related motivators, including: wanting to contribute to the community goal, being motivated from a family member, or being motivated due to a competition.

[19] Based on the program sample as of May, 2012.

Participants found the program to be satisfying and useful. Participants were satisfied with all program activities and this satisfaction was sustained over time. Participants reported being most satisfied with the True Value discounts, interactions with the Energy Ambassador, the Home Energy Makeover Contest, and the program website. Participants also found information provided through the various program activities to be useful, and usefulness was also sustained over time. They reported that the Energy Ambassador and the website were the most useful.

Participants conducted low-cost, no-cost actions and they sustained these actions over time. Participants most commonly reported taking the following actions: switching off lights, switching off electronics, installing energy efficient lights, changing thermostat settings, and using a clothesline rather than a clothes dryer. The number of actions taken by pledgees varied but those who recalled pledging reported conducting statistically significantly more actions those who did not recall pledging. Actions also tended to be sustained over time, even a year or more after pledging, and the number of actions tended to increase over time. This increase was statistically significant.

Participants were motivated to take energy-saving actions partially due to program-related activities. While the largest motivator to taking energy-saving actions was cost savings and reduced energy consumption, motivators specific to the program also contributed to participant actions. Common motivators included: encouragement from a family member, wanting to contribute to the community goal, and encouragement from information received through the program. The most common barrier to taking more actions was cost, and this remained the top barrier at time 4.

Respondents who could recall their pledge were more likely to conduct their pledged action compared to those respondents that could not recall their pledge. "High recallers" completed a significantly higher proportion of pledged actions compared to "low recallers." However, only 32% of respondents wanted a reminder about their action. These respondents most commonly reported wanting to receive an email reminder (47%) or a refrigerator magnet (38%).

The CEP program appears to have increased awareness of Focus on Energy programs. Of residential respondents surveyed at time 4 (n = 69), 74% reported that they had heard of at least one program from Focus on Energy. The most well-known programs were the Home Performance with ENERGY STAR Program (43% of respondents aware) and the Appliance Recycling Program (41% of respondents aware). For the 51 respondents who reported being aware of at least one Focus on Energy program, the most common sources of awareness were the Way to Save, Burlington! website (43%) and word of mouth (41%).

The CEP program also appears to have influenced participation in Focus on Energy programs. Almost a third of survey respondents (30%) reported that they had participated in a program from Focus on Energy, most commonly the Lighting and Appliance Program (14%) and the Appliance Recycling Program (9%). In all but one instance, participation in Focus on Energy programs occurred after the CEP Program had begun. As with energy-saving actions, the

largest motivators for participating in Focus on Energy programs were cost savings and reduced energy consumption. However, respondents also noted contributing to the community goal (62%) and fulfilling their pledge (38%) as motivators for participating.

2.5 Energy Task Force Perspective

This section presents perspectives from ETF members. Findings presented in this section are based on results from in-depth telephone interviews and an online survey with ETF members. This section first summarizes the objectives and approach to conducting the ETF interviews and surveys. It then summarizes results from in-depth interviews with ETF members and results of the online survey with ETF members. This section concludes by providing key findings from both analysis tasks. All data collection instruments are found in Appendix A.

2.5.1 Objectives and Approach

As defined in the evaluation team's original scope of work, the primary objectives of the ETF interviews and surveys were to:[20]

- Characterize and assess the strength of interactions among ETF members,
- Identify challenges experienced by ETF members,
- Identify recommendations to improve the CEP Program, and
- Learn if there is potential for the program to continue in Burlington, WI without the financial and organizational support of the We Energies CEP Program.

Following development of the original scope of work, the evaluation team identified a number of secondary objectives:

- Identify the value of the ETF to this type of program,
- Identify the value of the Energy Ambassador to this type of program,
- Characterize the frequency and type of communication ETF members conducted with Burlington community members, and
- Report on the impacts from participating in the ETF on ETF members' energy efficiency behaviors and knowledge.

To address these objectives, the evaluation team utilized a two-pronged approach to this task. First, the evaluation team conducted in-depth interviews with ETF members during December 2011 and January 2012. The interviews served to collect qualitative information on ETF

[20] The scope of work was defined in an internal evaluation team memorandum entitled "We Energies CEP Pilot Evaluation – Revised Scope of Work," submitted to the evaluation team manager on October 5, 2011.

member experiences, feedback on how ETF members viewed program attributes, and potential desire to continue the program long-term following completion of the pilot funding. Following the interviews, the evaluation team then fielded an online survey with ETF members to collect the quantitative data needed to feed into a network analysis of ETF members. The main purpose of the network analysis was to characterize communications among ETF members as well as communications that ETF members had within their unique Burlington communities. Because data collection ended in February 2012, findings focus on program experiences from January 2011 to February 2012.[21]

2.5.2 In-Depth Interviews

As stated in the introduction, the ETF played a key role in supporting the Energy Ambassador in CEP Program implementation efforts during 2011. Because ETF members played a substantial role in the program, the evaluation team wanted to seek their input on how the program was implemented and managed. The evaluation team, therefore, conducted in-depth interviews with ETF members to collect their feedback on their experiences with the ETF and the program as a whole. This section begins by stating the interview objectives and methods. It then presents interview results and concludes by summarizing key interview findings.

To address the overall evaluation objectives identified in Section 2.1, the evaluation team identified a number of specific objectives for the interviews. The interview objectives focused on collecting ETF members' perceptions of:

- ETF members' roles in the Burlington community,
- ETF members' roles in the ETF,
- Experiences with participation in the ETF,
- The role of the ETF in program implementation,
- The role and significance of the Energy Ambassador, and
- Experiences and feedback on the program, as a whole.

To meet these interview objectives, the evaluation team conducted in-depth telephone interviews with eleven of fourteen ETF members during December 2011 and January 2012. The evaluation team attempted to contact all ETF members during this time, but the remaining three ETF members did not respond to the evaluation team's request for an interview.[22] Following

[21] The evaluation team focused the in-depth interviews on the 2011 calendar year, while the time frame for the social network analysis was December 2011-Februray 2012.

[22] The Energy Ambassador is technically an additional member of the ETF (creating a total of fifteen members), however the evaluation team did not interview him as part of this task because the evaluation team was seeking input from non-program affiliated community members participating in the ETF.

completion of the interviews, the evaluation team coded responses to summarize results and identify key themes.

Composition of the ETF

In 2011, the ETF was made up of the Energy Ambassador and fourteen volunteer community leaders; however, one ETF member did not attend meetings due to scheduling conflicts. Nearly all of the 2011 ETF members were founding members of the ETF, meaning that all but two had been active with the program since attending a kick-off meeting prior to the actual formation of the ETF in July 2010. Of the fourteen ETF members, one stopped participating in September 2011 due to a job change, and two joined in December 2011. The ETF members represent various segments of the community:

- **Business type** – four worked for a commercial business; one worked for a large industrial facility; two worked for a media group; two worked at a local non-profit organization; two worked in government; two worked in a local school; one worked at We Energies.
- **Seniority** – eight of fourteen ETF members were owners or a lead manager for their organization.
- **Location and length of time at business** – seven of the eleven interviewed ETF members worked in the City of Burlington at their current job for more than five years.
- **Residency in Burlington** – eight of the eleven interviewed ETF members lived in the City of Burlington; all lived there for more than ten years and three had lived in Burlington for nearly their entire lives. Of those who did not live in Burlington, one was involved with development work in the city, one had a business in the city, and one was a We Energies employee who lived in a nearby town.

As shown in the above bullets, ETF members tended to be long-term community members and/or community leaders, and thus were invested in the Burlington community and played an active role in shaping its future. While not necessarily invested in energy efficiency, collectively they tended to have influence in all Burlington market sectors: commercial, industrial, governmental, institutional, and residential. Respondents reported joining the ETF for a variety of reasons.[23] These included interests in:

- Investing in the city (three respondents),
- Liking the idea of saving energy (three respondents),
- Helping community members save money (two respondents),
- Ensuring their organization was represented (one respondent), and
- Learning how their business could benefit from the program (one respondent).

[23] The interview guide collected open-ended responses, thus two respondents provided multiple responses. Three respondents skipped this question.

Members provided multiple responses, and motivators tended to be both altruistic (doing something for the city and helping community members save energy and/or money) and business-related (ensuring their organization was represented and learning how their business could benefit from the program). While the evaluation team did not find these varying motivators to impact ETF member experiences, it is important to understand these motivators to support the recruitment of additional ETF members in Burlington or a different community.

The group tended to meet roughly every six weeks in 2011, depending on project needs. In addition to these meetings, the Energy Ambassador communicated with individual members via email on an as-needed basis. ETF members, however, reported rarely talking to each other about the program outside of the meetings.

Roles and Responsibilities

As designed, the Energy Ambassador served as the main organizer, or "chairman," for the ETF. The Energy Ambassador created the agendas and led meeting discussions, while ETF members provided feedback on project ideas and offered contacts for people who could help the Energy Ambassador implement an activity. One member described the ETF as a "reaction committee" whereby the Energy Ambassador would present an idea and ETF members would react to it. ETF members described their role in the program as three-fold:

Community Liaisons – ETF members served as liaisons between the Energy Ambassador and their own community networks. ETF members would either introduce the Energy Ambassador to community members or identify individuals whom the Energy Ambassador could contact about program activities. ETF members also provided the Energy Ambassador with feedback on how their own community members might react to specific project ideas.

Project Advisors – ETF members provided feedback to the Energy Ambassador on the feasibility of marketing and outreach activities in Burlington.

Project Support – ETF members offered implementation support to the Energy Ambassador on specific projects for which a member had expertise or relevant community connections.

ETF members indicated that they did not foresee their role changing in the foreseeable future.

ETF Member Perspectives on the ETF

To better understand ETF members' experiences with the ETF, the evaluation team asked members for feedback on the role of the ETF in the CEP Program, the meeting structure and communication styles, and successes and challenges of participating in the ETF.

Role of the ETF

The evaluation team asked ETF members about the role of the ETF within the program. Results show that all ETF members thought the ETF was vital for program success. They claimed that

the ETF provided the Energy Ambassador with a connection to the community, a sounding board for program ideas, and a group of people to help spread the word about the program. Below are three quotes from ETF members that express these sentiments:

> *It's a group of people who are vested in the program and can help sell the program to the community.*
>
> *Small towns are cliquey and [the Energy Ambassador] is a "foreigner." It would have been very difficult for him to come in on his own. His motives would be questioned. The ETF helps make the introductions smoother… It helps get the program to a fast start.*
>
> *There is benefit to having the leaders present at the ETF meetings because they have connections, hopefully influential, and a proven ability to get things done.*

As described in the last quote, the ETF members possessed the leadership to help the Energy Ambassador implement projects. Another ETF member mentioned that another benefit was that ETF members represented several aspects of the community, providing the Energy Ambassador with key contacts from many community groups. Three respondents indicated they felt the program would actually fail without an ETF. Together, these results suggest that the ETF has been a critical part of the program, especially because the Energy Ambassador was not originally part of the Burlington community.

Feedback on Meeting Structure and Communications

The evaluation team also asked respondents to provide feedback on the structure of the ETF meetings and the communication they had with the Energy Ambassador and/or ETF members outside of the meetings. Results showed that all of the ETF members spoke positively about the structure of the ETF and the chosen methods for communicating with each other outside of meetings.

While the Energy Ambassador served as the "chairperson" for the group, ETF members stated that everyone tended to provide input and that they would strive for consensus on topics. Only one person mentioned that some ETF members were more assertive, or dominating, than others. All ETF members thought the number of meetings, amount of communication, and format of communication worked well and that discussions were relevant and productive.

Participation Experiences

The evaluation team also asked respondents to describe what they saw as the most successful aspects of the group and to describe the most satisfying part of being a member in the group.

ETF members described the most successful aspects of the ETF—they included practical and theoretical aspects of the ETF: [24]

- Providing community contacts to the Energy Ambassador (five respondents);
- Vetting ideas for program implementation (three respondents);
- Providing program support (such as helping to resolve an issue the Energy Ambassador is facing or providing some sort of actual implementation support) (two respondents);
- Utilizing resources from a diverse group of people (two respondents); and
- Collaborating successfully as a team (one respondent).

Many of these aspects correspond with sentiments expressed in the above section, specifically the ability to provide feedback to the Energy Ambassador and ability to collaborate with a diverse group of people. ETF members described the most satisfying part of being a member as:[25]

- Learning about energy efficiency opportunities (three respondents),
- Playing a key role in the program development and decision making process (two respondents),
- Seeing the impacts of the work (seeing declines in energy use; seeing the community get involved) (two respondents), and
- Knowing that they are helping the community (one respondent).

These responses tended to be more results-oriented. Interestingly, while the main purpose for the ETF was not to educate ETF members about energy efficiency, this was a positive by-product of these meetings. In fact, three ETF members reported that this was one of the more satisfying parts of being on the ETF. This knowledge gain was evident in the ETF member survey results, which showed that ETF members did report learning more about energy efficiency as a result of participating in the ETF (see Figure 2-25).

ETF members did not express any challenges associated with being an ETF member. Three ETF members thought the program development phase (i.e. defining program goals and objectives) could have been conducted faster. However, once program goals and objectives were defined and the Energy Ambassador was onboard, ETF members thought that the program ran smoothly. Two ETF members thought that funding for marketing and outreach activities was insufficient. As a result, the Energy Ambassador needed to rely on community donations and volunteer time

[24] The number of respondents who provided each answer are listed in parentheses. Questions were open ended, so some respondents provided multiple responses.

[25] The number of respondents who provided each answer is listed in parentheses. Questions were open ended, so some respondents provided multiple responses. Four ETF members did not answer this question directly.

to implement some outreach activities, which one member stated was asking too much from the community.

ETF Member Perspectives on the Role of the Energy Ambassador

In addition to asking ETF members about the role of the ETF within the program, the evaluation team also asked ETF members about the role of the Energy Ambassador within the program to better understand the significance of the Energy Ambassador to this type of program. The evaluation team found that ETF members all agreed that the role of the Energy Ambassador was extremely important. They defined the role as providing both leadership and day-to-day management and implementation of the program. In addition, all ETF members expressed positive reactions to the performance of the current Energy Ambassador:

> *He over-excelled at the job.*
>
> *He is an outstanding individual that can pick up the ball and run with it.*
>
> *He is the cog in the wheel…he carried things through.*

The evaluation team asked ETF members what they thought the Energy Ambassador's major accomplishments were, his future priorities, and opportunities for changing the Energy Ambassador's position or role. Results of these questions are presented in the sub-sections below.

Energy Ambassador's Accomplishments and Priorities

The evaluation team asked ETF members about the Energy Ambassador's most important accomplishments in 2011. ETF members provided a wide range of responses, which in aggregate described all of the tasks that the Energy Ambassador carried out in 2011:[26]

- Building awareness/visibility of the program (seven respondents),
- Successfully implementing specific projects (six respondents),
  - Facilitating audits/retrofits (especially with public buildings and commercial buildings),
  - Recruiting pledges,
  - Implementing the Home Energy Makeover Contest,
  - Presenting at service clubs,
  - Participating in community events,
- Reaching out to Burlington community members (five respondents),
- Program planning (four respondents),

[26] This was an open-ended question and ETF members provided multiple responses.

  - Organizing the ETF,
  - Identifying project opportunities,
  - Setting goals, and
- Managing the program to attain program goals (four respondents)

The evaluation team also asked ETF members what they felt the Energy Ambassador's priorities should be for 2012 (recall that interviews were conducted in late 2011 – early 2012). Again, the evaluation team received a variety of responses.[27] These included:

- Building awareness among harder to reach community groups, specifically small business and residential sectors (five respondents)
- Implementing the School Energy Competition (four respondents)
- Identifying and carrying out new projects (four respondents)
  - One member said that a priority should be to investigate opportunities to save on other resources, such as water
  - Another mentioned creating a list of certified contractors for community members to reference
- Continuing to serve as a leader and performing jobs tasked to him (three respondents)
- Sharing energy savings results with the community (two respondents)
- Finding additional budget for marketing and outreach activities (one respondent)

As shown, the Energy Ambassador's accomplishments in 2011 and priorities for 2012 covered all aspects of his job, including program planning, management, and implementation. Interestingly, one member suggested that a 2012 priority should be for the Energy Ambassador to investigate other resource conservation opportunities. However, moving beyond the goal of energy savings could be construed as being outside the intended scope of this program, which was designed to reduce energy consumption, and thus would have been discussed with We Energies if the program had prioritized this activity.

Feedback on Changing the Energy Ambassador Role

In addition to asking ETF members about the Energy Ambassador's past and future activities, the evaluation team also asked respondents about any potential implementation impacts that could occur if the Energy Ambassador role were eliminated and any impacts they foresaw if the current Energy Ambassador was replaced by someone else. All of the ETF members said that removing the Energy Ambassador role would be a mistake.

[27] This was an open-ended question and ETF members provided multiple responses.

Below are a few pointed responses:

> *[The program] would wither and die.*
>
> *[The] program would be eliminated.*
>
> *[The] program would not sustain.*
>
> *[The] program needs someone driving the bus.*
>
> *[The] program would fall flat on its face.*

ETF members said the program would fall apart without an Energy Ambassador for a variety of reasons:

- The community needs the Energy Ambassador to provide a constant reminder of energy efficiency opportunities.
- The ETF needs the Energy Ambassador to serve as a facilitator to sustain the group; without this role the group would be less productive.
- The program needs a central figure/leader to drive the projects.

In addition, ETF members did not think the Energy Ambassador position should be volunteer-based. They did not think anyone would volunteer to serve as an unpaid Energy Ambassador. They stated that the position required daily commitment and current ETF members were too busy to commit the required time. One member also stated that it was important to fill the position with someone qualified to conduct the work, and finding a qualified person to fill the position as a volunteer would be challenging.

Respondents tended to think it was less important for the current Energy Ambassador to remain in the role of the Energy Ambassador for the foreseeable future. Eight of the eleven respondents did not think it mattered so long as the new Energy Ambassador was qualified and that a transition period was provided. However, three ETF members expressed concern with transitioning the role to someone else, stating that the current Energy Ambassador developed a rapport with the community. One of these ETF members also thought that such a staff transition should not occur until the program was more established (which they thought could occur after another year after the interviews were conducted, which would be sometime in 2013). The evaluation team asked ETF members what qualifications they would seek in a new candidate and received a variety of responses including:

- Communication skills,
- Public speaking skills,
- Marketing skills,

- Specific personality traits: outgoing, good charisma, dedication, patience, organization, self-motivation, and an ability to get along with a variety of people, and
- Specific knowledge requirements concerning energy efficiency, energy, and the CEP Program.

As shown in the above bullets, the skill set required for an Energy Ambassador includes both outreach skills and program-related knowledge. These attributes are important considerations if We Energies were to hire a new Energy Ambassador, either for Burlington or a new community.

ETF Member Perspectives on the CEP Program

The evaluation team also asked ETF members about their views on the CEP Program as a whole. ETF members all spoke positively about the program. The evaluation team asked ETF members what aspects of the program they thought had been particularly successful, and ETF members identified the following:

- The Home Energy Makeover Contest (six respondents),
- Billboards/banners (five respondents),
- Outreach to particular groups; especially businesses and service groups (three respondents),
- Participation at the Home Expo (two respondents),
- Participation at the Farmers Market (two respondents),
- Development of the website/ Facebook page (two respondents),
- Newspaper articles (two respondents), and
- Newsletters (one respondent).

As shown in the list above, respondents identified the Home Energy Makeover Contest and the billboards/banners as being the most successful aspects of the program in 2011. ETF members reported that the Home Energy Makeover Contest tended to create a lot of buzz about the CEP Program within the community, due to the nature of the competition. The billboard/banner was very visible to the public, as the signs were located on the downtown streets of Burlington, drawing attention to the CEP Program.[28]

The evaluation team also asked ETF members if any program aspects were not working well. ETF members originally identified few challenges, but when pressed, they offered the following responses:

[28] While the evaluation team did not complete a budget analysis, it is important to note that these initiatives were also likely to be more costly compared to the other items listed.

The program development phase was slow. It took significant time to finalize goals and objectives; a part of this included prolonged waiting for utility data, which program planners required to generate the goal. That being said, these ETF members also acknowledged that program planning took significant effort considering that it was a new type of program (three respondents).

The program suffered from insufficient budget for marketing and outreach. As a result, the program needed to rely on volunteer time and donations, which they thought was challenging. (two respondents).

The program goal of community outreach was difficult, in itself, because it was challenging to actually obtain pledges and reach out to community members.[29] (two respondents)

Community engagement was potentially hampered because community members might not have been familiar with the purpose behind the program. (one respondent)

The program suffered because incentive levels for measures changed during the pilot period, so community members did not receive consistent levels of financial assistance throughout the pilot time period.[30] (one respondent)

As shown, there were only three challenges expressed by multiple respondents: slow program launch, insufficient budget for marketing and outreach, and the notion that it was hard to motivate community members to act. This last challenge is the exact barrier that this program is designed to address, and thus not necessarily a challenge to this program, but more a challenge to promoting energy conservation and energy efficiency in general. To address some of the challenges presented, ETF members provided the following recommendations for program improvement:

Develop a budget in conjunction with program planning so that the budget matches project needs and implementers do not need to search for additional funds and/or donations.

Expand the program to surrounding areas so that marketing and outreach activities would be more productive.

Use Burlington as a template for faster program development in other communities.

Feedback on the Future of the CEP Program

The evaluation team asked respondents what ETF members felt should happen to the program after the pilot program ends. Specifically, the evaluation team asked ETF members whether they wanted to see the program continue once the pilot program finished and how they envisioned the program being funded in the future. All of the ETF members stated they wanted to see the

[29] This is a barrier to energy efficiency implementation of which the CEP Program is designed to help address.

[30] These incentives are provided from other We Energies or Focus on Energy incentive programs and are not managed or provided by the CEP Program.

program continue; however, one stipulated that they would only want to see the program continue provided that it was generating energy savings. That being said, ETF members were uncertain about how the program would be funded. Four ETF members specifically said that there were no alternative funding sources available outside of We Energies. One member mentioned there might be less of a need for continued marketing and outreach funds in the future provided that incentives for energy efficient measures would still be available. Other ETF members provided potential funding alternatives, although none were confident that the following funds would be necessarily available or politically feasible. These alternatives included:

- City of Burlington (however, the City representative said they had no funds available for this type of program),
- Local service groups,
- Some type of grant,
- A special utility rate code; however this person thought the idea would be politically unfeasible, and
- A partnership of funding sources (because no particular group would pay the entire cost).

Two ETF members thought We Energies' budget for the program should have been greater to sufficiently cover associated marketing and outreach costs. Three ETF members expressed the sentiment that We Energies should not pull out of the program, because the utility was realizing significant public relations benefits from this type of program:

> *It's a small price to pay for community involvement.*
>
> *It's a blue ribbon for We Energies…it's a good promotional tool for them.*
>
> *It's good for all involved [including We Energies].*

Not only did some ETF members believe that the program should continue in Burlington, but two ETF members expressed opinions that the program should be expanded throughout the state. One of these two members specifically mentioned that the program in Burlington should continue in conjunction with new communities, with the idea that Burlington would continue to serve as the pilot community by being a few years ahead of the other communities.

2.5.3 Online Survey

Following the in-depth interviews, the evaluation team fielded an online survey with the ETF members and the Energy Ambassador. Compared to the in-depth interviews (summarized in Section 2.5.2), which were more exploratory in nature, the online survey was designed to collect specific closed-ended responses to questions related to member characteristics and frequencies of certain types of communications. This section begins with a discussion of the online survey

objectives and methods. It then presents survey results and concludes by providing a summary of key online survey findings.

The objectives of the survey were to:

- Characterize member participation in the ETF and impacts that participating in the ETF may have had on energy efficiency behaviors and knowledge, and
- Define the frequency and type of communications among ETF members, and those between ETF members and the Burlington community.

For the purposes of the survey, the evaluation team asked community members to report on their experiences from December 2011 to February 2012, a three-month period. Unfortunately, only seven of the fifteen ETF members (including the Energy Ambassador) responded to the survey despite multiple attempts to contact all ETF members. Despite limited responses, the evaluation team was able to obtain valuable information due to the structure of the questions asked in the survey.

Following data collection, the evaluation team tallied responses related to member characteristics and compared relevant responses to similar data received from CEP Program participants, defined as community members that pledged to save energy. The evaluation team also calculated various types of communication densities, the number of communications that occurred over the total number of possible communications.[31] The evaluation team then compared densities to other question responses to understand if the levels of communications help explain any other findings, such as the number of energy efficient actions that occurred or the number of meetings attended.

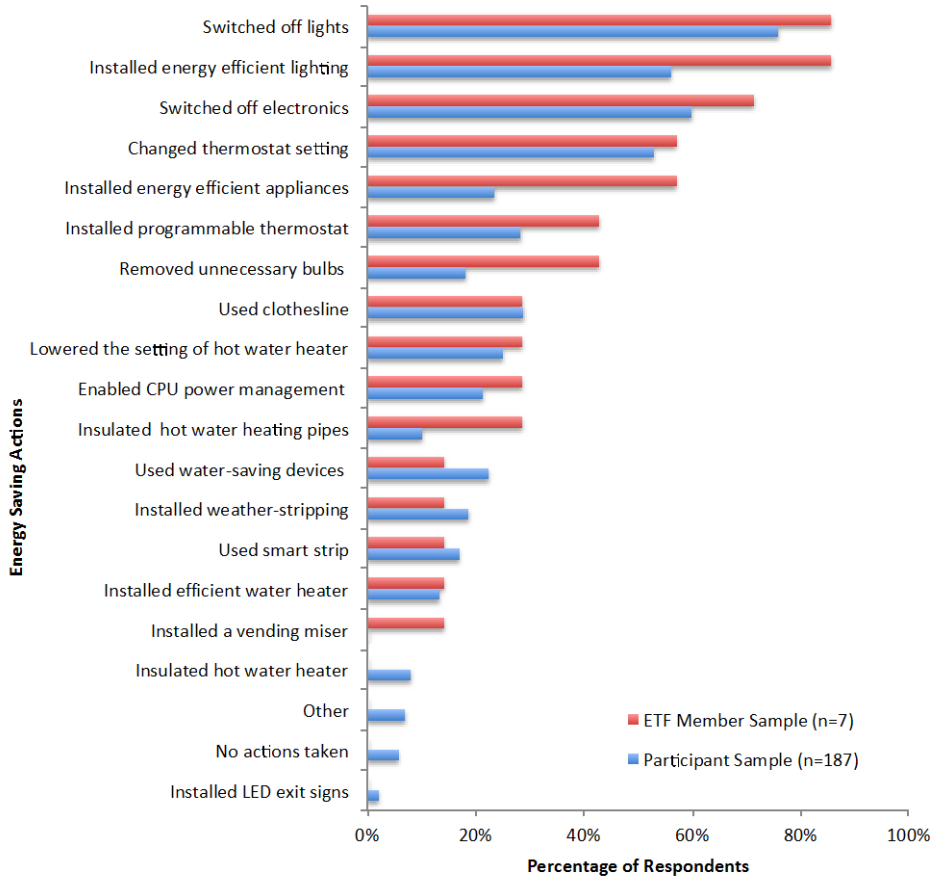
Member Characteristics

The survey allowed the evaluation team to build upon the information that had been collected from the in-depth interviews. Nearly all of the respondents to the survey (six out of seven) joined the ETF in 2010. On average, respondents reported attending seven of the eleven meetings in 2011. In other words, ETF member respondents did not tend to go to every meeting, but they did attend meetings more frequently than not.

[31] The evaluation team calculated in-densities (the number of ETF members who reported speaking to a particular ETF member over the number of potential ETF members that could have spoken to that person), out-densities (based on the number of ETF members that a particular ETF member reported speaking to over the total number of ETF members the person could have spoken to). The evaluation team calculated densities using two different criteria: 1) whether an individual reported a certain communication occurred, or 2) whether anyone reported that the communication occurred.

All respondents reported that participation in the ETF led them to partake in energy efficiency actions (see Figure 2-25). The top action taken was similar to that of the participant respondents (switching off lights).[32] While the other actions were largely similar, a greater percentage of ETF members reported conducting the majority of the actions. On average, member respondents reported taking more energy efficient actions compared to participant survey respondents (6.29 compared to 4.81). ETF members reported taking a minimum of two energy efficient actions and a maximum of fifteen actions.

Figure 2-25: Energy-Saving Actions Taken Since Participating in the Program by ETF Member Respondents and Participant Panel Respondents



ETF members also reported that they thought their knowledge of energy efficiency increased as a result of participating in the ETF (see Table 2-18). To gather this information, the evaluation team asked respondents to state whether they agreed or disagreed with the knowledge phrases listed in Table 2-18 using a ten-point scale, with one representing "completely disagree" and ten representing "completely agree." Results show that respondent knowledge about energy

[32] Program participants are defined as anyone who made a pledge. Refer to Section 2.4 for more information about the participant responses.

efficiency increased both within their home and within the workplace as a result of participating in the ETF. While the purpose of the ETF was not specifically to increase member knowledge, it does appear to be one of the outcomes of participating in the meetings. As shown in Table 2-18, the average knowledge scores were slightly higher for the workplace, compared to the home.

Table 2-18: Increase in Energy Efficiency Knowledge as a Result of Participating in the ETF

Knowledge Topic	Mean Score (1-10) [a] (n=7)
Knowledge about ways to save energy in workplace increased	8.57
Knowledge about EE programs increased	8.29
Knowledge about ways to save energy in home increased	8.00
Knowledge about business energy use increased	8.00
Knowledge about family's energy use increased	7.71

a. Score is based on 10-point scale, with 1 representing "completely disagree" and 10 representing "completely agree."

Network Analysis

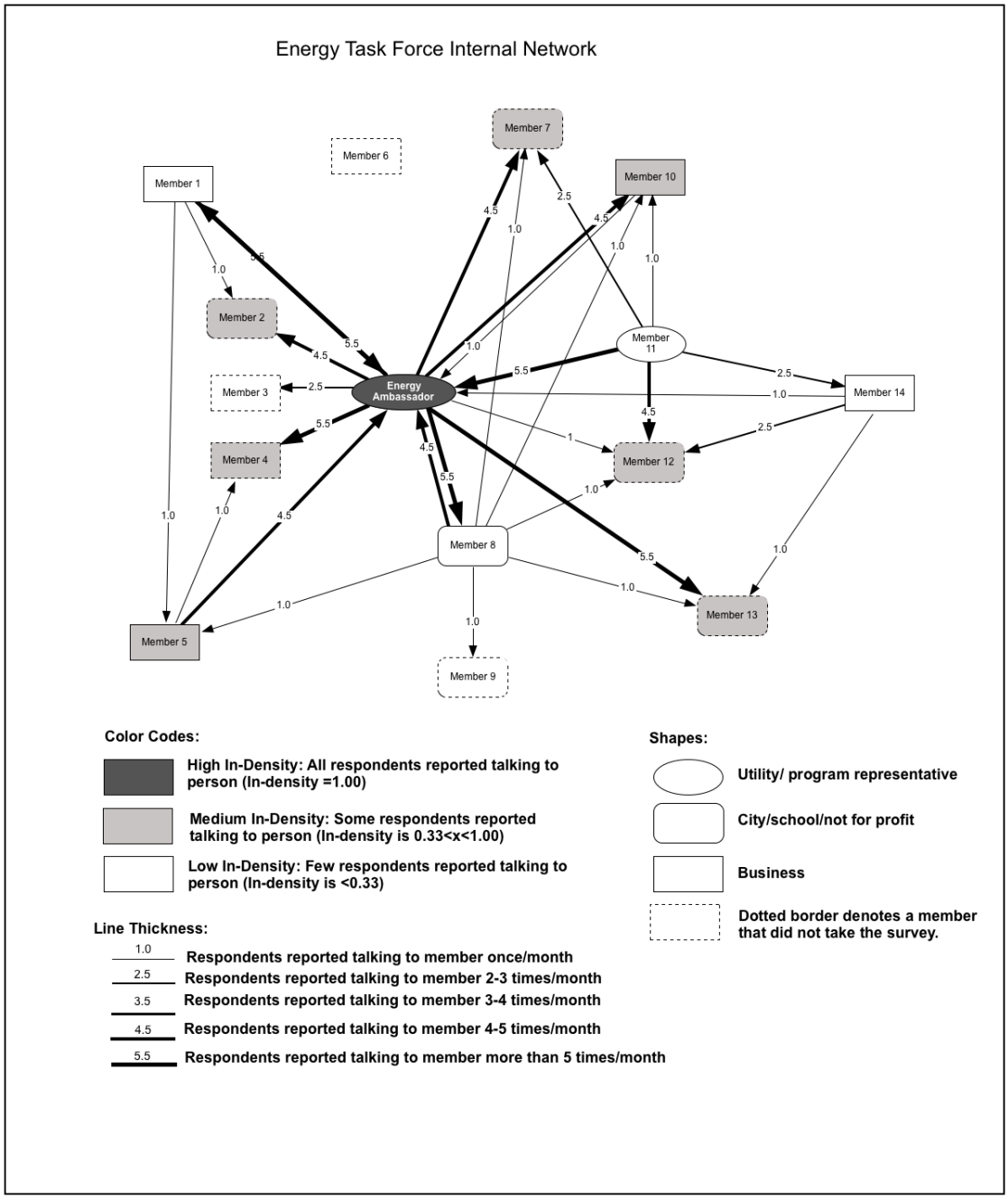
To document the structure of the ETF, the evaluation team asked ETF members to indicate both the number and type of communications they had with other ETF members *and* with the Burlington community from December 2011 to February 2012. These results help demonstrate what relationships actually existed during this time, rather than relying solely on the open-ended responses from the in-depth interviews. Results are separated into the following two sub-sections: the internal network, which describes relationships between ETF members, and the external network, which describes the relationships between ETF members and the Burlington community.

Internal Network

To better document the structure of the ETF, the evaluation team asked ETF members to indicate the number and types of communications they had with other ETF members. Overall, the evaluation team verified, as described in Section 2.5.2, that the Energy Ambassador was the hub of the organization (see Figure 2-26). According to survey results, all but one member communicated with the Energy Ambassador at least once a month (from December 2011to February 2012). In addition, of the communications that occurred, the Energy Ambassador reported talking to ETF members more frequently compared to ETF members talking to other ETF members. On average, the Energy Ambassador reported talking to ETF members "four to five times" during the three months in question compared to ETF members who reported talking to other ETF members "once" on average during the three months in question. This description of the network and levels of communication corresponds with how ETF members described the

ETF in the in-depth interviews, with the Energy Ambassador as the main organizer and implementer and ETF members providing support or advice.

Figure 2-26: Communications among ETF Members between December 2011 and February 2012

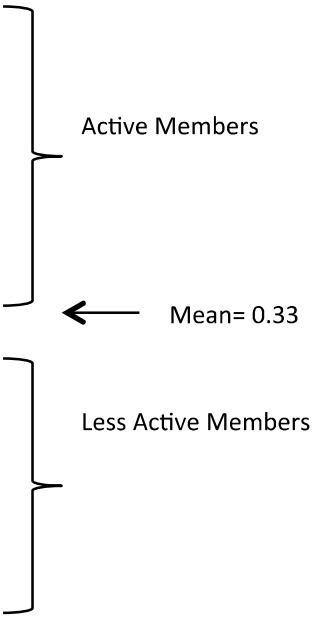


Besides the Energy Ambassador, a few ETF members stood out as being more active compared to others. These ETF members represented the city government, a parochial high school, the Chamber of Commerce, a large industrial business, and two media-related businesses (see Figure

2-27). Another way to examine ETF member activity levels is to compare the number of times respondents reported communicating with a particular ETF member outside of ETF meetings. To do this, the evaluation team took the number of times an ETF member communicated with a particular individual and divided that number by the total number of ETF members that could have reported speaking to the individual to generate an "in-density" of communication. On average, the evaluation team found the mean in-density to be 0.33 (< 0.33 was considered "low," greater than 0.33 but less than 1.00 was considered "medium," and 1.00 was considered "high"). When the evaluation team compared in-density results across team members, the evaluation team found that all respondents reported communicating to the Energy Ambassador, between December 2011 to February 2012, (in-density equal to 1.00), but less than a third of the respondents reported speaking to the other members outside of meetings (the average in-density for ETF members other than the Energy Ambassador was equal to 0.29).

Figure 2-27: Member Activity Levels

Member's Organization	In-Density
Energy Ambassador	1.00
Member 12	0.67
Member 13	0.50
Member 7	0.50
Member 10	0.50
Member 2	0.33
Member 5	0.33
Member 4	0.33
Member 9	0.17
Member 8	0.17
Member 14	0.17
Member 3	0.17
Member 1	0.17
Member 11	0.00
Member 6	0.00



The evaluation team also wanted to know about the extent of the conversations between the six ETF members who reported talking to other ETF members. To research this, the evaluation team asked the ETF members if they talked to each other about thirteen specific CEP-related topics.[33] As shown in Table 2-19, the evaluation team found that the ETF members reported talking to each other about a variety of program-related topics. Active ETF members tended to discuss more varied topics compared to less active ETF members (five compared to two topics of CEP-related conversation). In other words, active ETF members not only talked to a greater

[33] The thirteen topics included an "other" category.

number of people, but they also talked about a greater variety of program-related topics.[34] These results suggest that the active members were truly engaged in conversations with ETF members and not simply carrying out single conversations with a number of people.

Table 2-19: Types of Conversations held Between ETF Members from December 2011 to February 2012

Types of Conversations	Total # of Conversations	Total # of Conversations (excluding those with the Energy Ambassador)
Meeting with businesses	13	5
Conducting outreach events	12	
Other [a]	10	8
Attending Energy Task Force meetings	9	2
Recruiting pledges	7	
Organizing Home Energy Contest	7	
Writing news articles	6	1
Organizing School Energy Contest	6	1
Writing email blasts	4	
Energy Task Force agendas/organization	3	
Curriculum development	2	
Conducting workshops	1	
Setting Community Goals	0	
Total	**80**	**17**

a. "Other" included general community involvement (n = 5), installing energy efficient measures (n = 2), making a video (n = 2), and program accomplishments (n = 1).

External Network

As the program was designed, the Energy Ambassador performed the majority of outreach to the community. However, according to early conversations with the Energy Ambassador, he hoped that the ETF also reached out to their own networks about the CEP Program. To understand if this in fact occurred, the evaluation team asked ETF members to document whether they reached out to any community groups to discuss any CEP-related activities. If a member had communicated with a community group, then the evaluation team asked them about the frequency of the conversation, the general topic of conversation, and the specific actor involved

[34] The evaluation team assessed other differences between active members and less active members (such as the number of energy efficient actions taken and knowledge in energy efficiency), but did not find any other noteworthy differences.

in the conversation. To define community groups and specific actors, the evaluation team relied on community groups and actors identified in the program's process maps.[35]

According to survey results, these external conversations occurred, but to a limited extent. Figure 2-28 presents these findings and shows that while ETF members conducted some outreach, the Energy Ambassador conducted the majority of it. The Energy Ambassador reported that he contacted someone from each of the identified community groups during the specified time (the density of external outreach equaled 1.00[36]), but the other ETF members reported that they communicated with a maximum of two community groups (average density of external outreach equaled 0.15). In fact, only four of the six ETF members reported having any type of CEP-related conversation with Burlington community members.[37] The frequency and diversity of those communications was much more limited compared to the Energy Ambassador. For example, the Energy Ambassador spoke to community groups multiple times per month (typically four times per month[38]), while the ETF members only spoke to community groups once or twice per month. In addition, the Energy Ambassador typically talked to community groups about a number of varied topics (the mean number of conversation topics was five),[39] while ETF members communicated with each other regarding two different topics, on average.

Three community groups were not touched by any respondent other than the Energy Ambassador. These groups included: community support, the city, and community service. It is possible that ETF members who did not complete the survey communicated with these groups about the CEP Program, but the evaluation team was not able to document this.

35 See the "Burlington Process Maps," produced by the Energy Center of Wisconsin on March 16, 2011.

36 The evaluation team calculated density of external outreach similarly to the in-density calculations described in the internal network analysis. To calculate density of external outreach, the evaluation team divided the number of groups an ETF member communicated with by the total number of groups that the ETF member could have reported talking to. These groups are listed in Figure 2-28.

37 One of the ETF members who did not report talking to Burlington community members joined the ETF in December 2011 and hence might have been less likely to reach out to community members during the specific time period from December 2011 to February 2012. Interestingly, the member representing the Burlington School District did not report communicating with schools about the CEP Program, despite the development of the School Energy Competition. Without further questioning, the evaluation team is not sure whether this was an oversight or if this member solely relied on the Energy Ambassador or other ETF members to plan and carry out the competition.

38 To calculate the mean number of times ETF members spoke to community groups, the evaluation team assigned values to ETF member's responses: one to two times = 1.5, two to three times = 2.5, three to four times = 3.5, four to five times = 4.5, more than 5 times = 5.5.

39 The evaluation team asked ETF members if they spoke to community groups about six CEP-related topics.

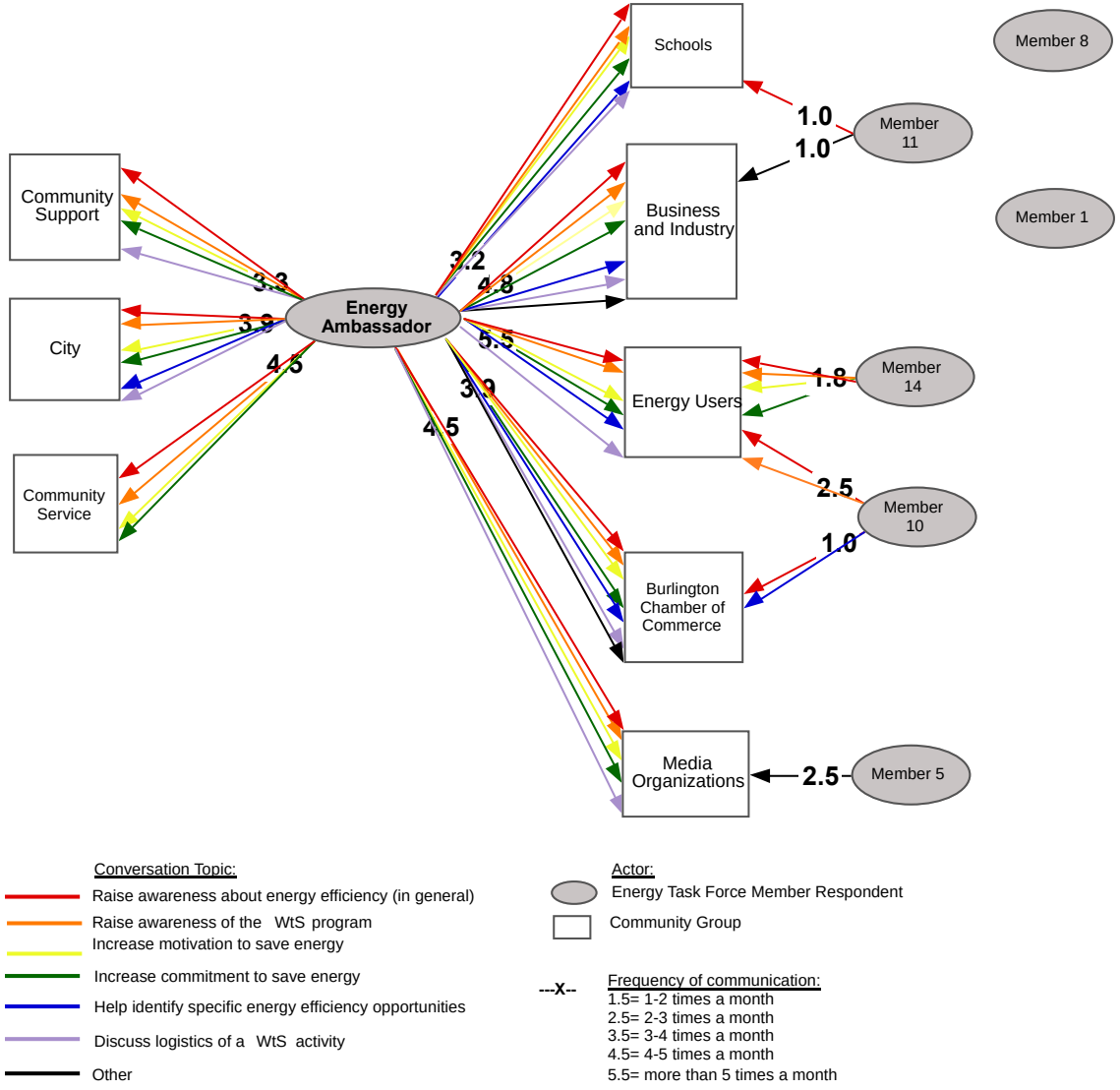
While the ETF (including the Energy Ambassador) communicated with all community groups, only some members within each group were touched.[40] For example, while the Energy Ambassador communicated with businesses, nobody reported contacting the Wanasek Corporation, HGI, or Aurora Healthcare. Since these businesses were listed as members on the process maps,[41] the evaluation team expected to have seen some sort of outreach to these groups. That being said, the outreach might have happened at an earlier date and thus not recorded through this survey, since the evaluation team only asked about communication between December 2011 and February 2012; the timeframe was limited to aid recall. The only community service organization touched by the program during this time period was the Women's Business Club.

Importantly, Figure 2-28 also highlights a potential risk to the CEP Program. Namely, if the role of the Energy Ambassador were eliminated, communications about the program to the community would likely be severely impacted. Because the Energy Ambassador serves as the main conduit of communication, community members would essentially be cut off from the program. If the program were to continue as designed, someone else would need to immediately step into the Energy Ambassador role or else the program would likely fall apart. This sentiment was also identified in the in-depth interviews when respondents said the program would "not sustain" or would "wither and "die" without an Energy Ambassador.

[40] The evaluation team identified community groups and group members by using the groups and members documented on the process maps ("Burlington Process Maps," produced by the Energy Center of Wisconsin on March 16, 2011).

[41] See the "Burlington Process Maps," produced by the Energy Center of Wisconsin on March 16, 2011.

Figure 2-28: Communications between ETF Members and Burlington Community Members between December 2011 and February 2012



Community Group	Specific Member	Communicated With an Energy Task Force Member (Dec '11-Feb '12)
Businesses	Business 1	✔
	Business 2	✔
	Business 3	
	Business 4	
	Business 5	
	Business 6	✔
	Business 7	✔
	Business 8	✔
	Business 9	
Community Service Organizations	Comm Service 1	
	Comm Service 2	
	Comm Service 3	
	Comm Service 4	
	Comm Service 5	
	Comm Service 6	✔
	Comm Service 7	
Community Support Organizations	Comm Support 1	✔
	Comm Support 2	✔
	Comm Support 3	
	Comm Support 4	✔
	Comm Support 5	
Chamber of Commerce	Chamber of Commerce 1	✔
	Chamber of Commerce 2	✔
	Chamber of Commerce 3	✔
	Chamber of Commerce 4	✔
School Representative	School Representative 1	✔
	School Representative 2	✔
	School Representative 3	✔
City of Burlington Representatives	City Representative 1	✔
	City Representative 2	✔
	City Representative 3	✔
	City Representative 4	✔
Customers	Customer Type 1	✔
	Customer Type 2	✔
	Customer Type 3	✔
	Customer Type 4	✔
Media Organizations	Media Org 1	✔
	Media Org 2	✔
	Media Org 3	✔

2.5.4 Key Findings: Energy Task Force Perspective

Based on results from both the in-depth telephone interviews and the online survey, the evaluation team identified a number of key findings. Results show that ETF members experienced the program favorably. They believed the structure of the program, with a paid Energy Ambassador and a volunteer-based ETF, worked well. Interestingly, ETF members would like to see the program continue; however, without We Energies' sponsorship, they were uncertain where they would find funding to support the program. These findings are highlighted in more detail below.

ETF Member Experiences with the Program

In-depth interviews provided feedback on ETF members' experiences with the program. The bullets below summarize noteworthy feedback directly relating to questions about their experiences with and feedback on the overall program design.

ETF members spoke positively about the CEP Program and their experiences with the ETF. All of the ETF members spoke positively about the structure of the ETF and methods for communicating with each other outside of meetings. Interestingly, while the main purpose for the ETF was not to educate ETF members about energy efficiency, three ETF members reported that this was one of the more satisfying parts of being on the ETF. Survey results confirmed that knowledge about energy efficiency increased as a result of participating in the ETF and ETF members also reported installing energy efficient equipment in their home or workplace as a result of participating in the ETF.

ETF members reported that the role of the Energy Ambassador was critical to program implementation. ETF members valued the Energy Ambassador's expertise in energy efficiency and marketing. ETF members thought someone else could replace the person playing the role of the Energy Ambassador, provided the replacement was qualified and that a transition period was provided.

ETF members reported that the role of the ETF was important. ETF members also agreed that the ETF played an important role in the CEP Program. Because the Energy Ambassador was not originally part of the Burlington community, ETF members played a critical role in providing the Energy Ambassador with community introductions and feedback on which activities could be successful in Burlington. ETF members stated they also helped the Energy Ambassador on projects where their specific expertise could be useful.

While all ETF members thought this type of organizational structure worked well, it is important to be aware that there is risk in relying almost entirely on one person to design and implement program initiatives. For example, if the person serving as the Energy Ambassador left the position, the institutional knowledge would also leave, and the timelines for meeting program goals could be impacted. While ETF members did not identify this risk specifically, they did

mention that if the Energy Ambassador were to be replaced by someone else, then the new person would need training to become knowledgeable in program activities and local politics.

ETF Member Communications

Results of the network analysis highlight the critical role that the Energy Ambassador played in program implementation. The bullets below summarize the strength and type of interactions, both internally (among ETF members) and externally (between ETF members and the community).

Communication among ETF members was limited. The importance of the Energy Ambassador role was evident in the social network analysis results, which confirmed that the Energy Ambassador played the primary role in communicating with ETF members about the CEP Program during 2011 and early 2012. According to survey results, all but one member communicated with the Energy Ambassador at least once a month (from December 2011 to February 2012). In addition, the Energy Ambassador reported talking to ETF members more frequently compared to ETF members who talked to other ETF members. Besides the Energy Ambassador, a few ETF members stood out as being more active compared to others. These ETF members represented the city government, a parochial high school, the Chamber of Commerce, a large industrial business, and two media-related businesses

Communication between ETF members and the community was limited. The Energy Ambassador also played the primary role in communicating with the Burlington community about the CEP Program during 2011 and early 2012, contacting someone from each of the identified community groups during the specified time. While the program design called for the Energy Ambassador to play the lead outreach role, program implementers hoped that ETF members would also reach out to their own networks about the CEP Program. According to survey results, these external conversations occurred, but to a limited extent. The frequency and diversity of these communications was much more limited compared to those from the Energy Ambassador. For example, the Energy Ambassador spoke to community groups multiple times per month (typically four times per month), while the ETF members only spoke to community groups once or twice per month.

ETF Members' Challenges and Recommendations

No ETF members expressed any major challenges with the program. That being said, ETF members identified the following two obstacles and recommendations for how to address them.

Slow program development – Three ETF members thought program development (i.e. defining program goals and objectives) was slow. One of these ETF members suggested that program planners build on the lessons learned from the Burlington program to help similar programs develop faster.

Insufficient program funding – Two ETF members mentioned that funding for marketing and outreach activities was insufficient. As a result, the Energy Ambassador needed to rely on community donations and volunteer time to implement some outreach activities, which one member stated was asking too much from community members. One of these ETF members suggested that program plans should be defined prior to a budget being defined (or in conjunction with defining a budget) so that adequate funds can be in place to pay for program activities.

2.6 Lessons Learned from the CEP Program

At the request of We Energies, the evaluation team reviewed lessons learned from the CEP Program that could be applied to other types of programs or to a statewide community-based program. These lessons learned are summarized below.

1. **Evaluations are more effective when programs are designed with the evaluation in mind and when goals are established early in the program design phase.** In the case of the CEP Program, the source of pledge cards was not tracked at the beginning of the pilot. Planning for evaluation from the outset would include establishing specific, measurable goals and then ensuring that data to evaluate progress toward these goals are available from the outset. Establishing indicators and goals of the program early on and throughout the program cycle allows program staff to focus efforts on activities that are specifically designed to meet the barriers targeted by the program.
2. **The multi-marketing approach undertaken by the CEP Program is effective in increasing awareness and program participation.** In particular, the competitions (specifically the school competition) were an effective means of gathering pledges and engaging the residential community. However, participants did not always learn of the program through the same means as pledging. For example, as shown in Table 2-4, 35% of respondents who pledged through the School Energy Competition first learned about the program through some other means. Having multiple touch points was thus successful in raising awareness of the program and then influencing community members to pledge to take action. See #5 below for detail about the link between pledging and energy-saving actions undertaken by pledgees.
3. **A person in the community who takes an active role in the program (such as the CEP Program Energy Ambassador) is an effective means of increasing participation and awareness.** For the CEP Program, the Energy Ambassador was very influential in marketing the program, whether through direct contact with customers or through various community events (see Figure 2-3 and Figure 2-28). Respondents rated information provided by the Energy Ambassador as the most useful of all marketing and outreach efforts (see Figure 2-17), and 20% of respondents who stated they had participated in a Focus on Energy program said they heard about the program directly from the Energy

Ambassador (Table 2-14). However, it is not practical to have a person in this role in every community, so other ways to fulfill this type of role should be identified. For example, utilities or Focus on Energy could have a regional account executive assigned to a set of communities, and he or she could be tasked with making connections with key members of the community. Account executives may be particularly useful in establishing connections with the business community and spurring these connections to take action to increase awareness of energy efficiency at their respective businesses.

4. **A community-focused website is an effective means of marketing.** The *Way to Save, Burlington!* website was the most common way that CEP participants had learned of Focus on Energy programs. As shown in Table 2-14, 43% of CEP participants aware of Focus on Energy programs had learned about them from the *Way to Save, Burlington!* website, whereas only 12% had learned about them from the Focus on Energy website. This suggests that having a website that is tailored to the community and focused on energy efficiency can be very influential in driving program participation by reaching a different segment. This can be accomplished at both the utility level and at the statewide level by having specified landing sites or microsites (i.e., a standalone single web pages or clusters of pages) targeting different communities or regions. However, utilities and Focus on Energy will have to raise awareness of these websites or microsites, and provide a reason for customers to visit them. This can potentially be accomplished through community connections made by account executives (see #3 above).
5. **Pledge cards are an effective means of increasing energy efficient behaviors among residential customers, especially for those who can recall their pledge.** The pledge card used for the CEP Program was tailored to residential customers. Because the pledge cards are not a large financial investment, they may be worth considering for other programs that wish to effect changes in residential customer behavior. All of the respondents reported that they were doing at least some of the energy efficient actions they had pledged to take, as noted in the program tracking data (see Table 2-11). When the evaluation team compared the self-reported pledge to the pledge in the program tracking data, we found that those who could more accurately remember their pledge were even more likely to have performed the actions (see description beneath Table 2-11). The utilities and/or Focus on Energy may want to consider building in a commitment component to other types of programs in the future, and providing a record of this commitment to participating customers as part of an existing or new statewide marketing campaign. This could be done statewide with an online pledge form that then gets mailed to the customer as a record of their pledge.
6. **Customers need a way to monitor their progress toward program goals.** The energy savings goal for the City of Burlington was meant to inspire action to contribute to reducing the community's energy consumption. Participants pledged, in part, to contribute to the community's goal. However, the community did not have a way to

monitor progress toward this goal. Rather than use the results of evaluations, utilities and/or Focus on Energy should provide more ongoing feedback to customers at the community or regional level, if there is a community-wide or regional goal established. This feedback does not have to be as precise as net savings – it can be as simple as reporting program activity in a particular geographical area, and this could be compared to a baseline. Utilities and/or Focus on Energy could use simple deemed savings values to report approximately how much energy has been saved since the start of the program. Customers may also be interested in other metrics such as reduction in greenhouse gases. The idea is to present information so that customers can track relative progress over time, rather than focusing on details such as whether the savings are gross or net. At a statewide level, results for each community could be posted on utilities' websites or on Focus on Energy's community-specific websites or microsites.

2.7 Conclusions and Recommendations

The evaluation team collected perspectives from the Energy Ambassador, participants, and the ETF to assess CEP Program processes. Following completion of all data analysis activities, the evaluation team synthesized results to develop overall conclusions from the process evaluation.[42] This last section first summarizes key findings from each data collection activity. It then presents overarching conclusions based on the key findings, and concludes by presenting recommendations.

2.7.1 Key Findings

The evaluation team identified key findings from interviews and surveys conducted with the Energy Ambassador, participants, and ETF members. This section summarizes these findings and then concludes by synthesizing these findings into three over-arching results about the program as a whole.

Energy Ambassador Perspective

According to feedback primarily from the Energy Ambassador, the evaluation team identified that some program activities were successful at garnering pledges while others were more successful at reaching out to the community about ways to save energy. Overall, the most successful activities included the School Energy Competition, the Home Energy Makeover Contest, a promotional video and booth at the Community Block Party, a school fair, the promotional banner and billboard, marketing blitzes to targeted businesses, and a project to install LED streetlights. While the School Energy Competition was most successful at motivating community members to pledge, garnering 56% of the pledges (as of May 2013), it is

[42] To see bulleted key findings from the participant panel study and the ETF interviews and surveys, refer to the key findings section at the end of each section.

less clear which activities were most successful at reaching out to the public. The Energy Ambassador believes that the School Energy Competition and the marketing blitzes to targeted businesses were the most effective public outreach activities.

Participant Perspectives

Results from the participant panel study largely supported the program theory. The evaluation team found participants satisfied with program experiences and that the following program-specific motivations encouraged participants to pledge to save energy and conduct energy-saving actions: competitions, the community goal, and family member encouragement. Respondents tended to conduct no- and low-cost energy-saving actions and they reported increasing the number of actions they took over time. Respondents who recalled pledging reported conducting statistically significantly more energy-saving actions than those respondents who had not recalled pledging. While recall was positively related to a greater number of actions taken, the majority of respondents (68%) did not want to receive a reminder of the recall. Additionally, results from the time 4 survey suggest that the CEP Program was effective in raising awareness of and participation in the Focus on Energy programs. While the School Energy Competition influenced participants to talk to family members about ways to save energy, the majority of respondents did not report talking frequently with peers about the program. Communication about the program remained relatively low throughout the eighteen-month period of investigation.

ETF Perspectives

ETF members provided valuable perspectives on the organization and future of the program. They believed the structure of the program, with a paid Energy Ambassador and a volunteer-based ETF, worked well. Results highlight that while ETF members played a valuable role in identifying viable outreach opportunities in Burlington, they played a very limited role in marketing the program to their own community networks. ETF members would like to see the program continue; however, without We Energies' sponsorship, they were uncertain where they would find funding to support the program.

2.7.2 Conclusions

Based on the key findings presented above, the evaluation identified three over-arching conclusions:

Community-based social marketing tools proved to be a relatively successful means to engage the residential community in energy efficiency. The core social marketing tools used to engage customers included community-focused messaging, competitions, and pledges. The evaluation team found that these tools did actually motivate participants to take energy-saving actions. Additionally, using a multi-pronged marketing and outreach approach allowed

community members to be touched by the program through a number of different channels, thereby engaging customers who might not have been willing to participate when they first learned about the program through other means. Determining the ultimate success of individual program activities, however, proved more challenging than expected because the program was implemented comprehensively with limited ability to measure success of specific program activities. However, participants did report learning of Focus on Energy programs, in part through the CEP Program, and they participated in Focus on Energy program, in part to contribute to the community goal and fulfill their pledge. At the same time, implementers had limited access to real-time consumption data to track energy savings.

The structure of a community-based ETF supporting an Energy Ambassador worked well but presented risks. ETF members appreciated having a dedicated and knowledgeable staff person to implement the program, and the Energy Ambassador found ETF members' feedback to be vital to program success. However, this program structure posed some risks because implementation relied almost entirely on one person, the Energy Ambassador. The majority of ETF members performed little direct outreach to their own community networks, something that the Energy Ambassador had hoped would occur. Similarly, there was little evidence to show that program participants actively talked to their peers about the program or about ways to save energy. Without community members actively spreading the word about the program, nearly all marketing and outreach responsibilities fell to the Energy Ambassador. Relying on one person to do all the outreach work is risky because it means that another person would need considerable training to step into that position.

It remains unclear whether the program in Burlington could be sustained after pilot funding ends in December 2013. Without funding for a paid Energy Ambassador, it would seem that the program would cease to operate. That being said, it is also unclear whether it would make sense to sustain program operations in Burlington given that the program would likely see decreased pledging over time since easy-to-reach customers have already pledged. As of May 2013, the Energy Ambassador reported preparing a transition plan to end the program by the end of 2013.

2.7.3 Recommendations

Because the CEP Program is a pilot program, the most important recommendation is for We Energies to continue to develop a strategic transition and/or exit plan during 2013. This will be particularly important in order to sustain favorable relations with community members. Such a plan would also play an important role in ensuring that momentum triggered by the CEP Program continues to be sustained by community members. If We Energies wants to continue conducting similar types of programs in other communities, or even sustain this program in Burlington, the evaluation team recommends the following actions:

Define non-pledge metrics to track the success of outreach efforts. While the number of pledges provides a clear quantitative understanding of program success, it does not effectively measure the relative success of each type of outreach effort. For example, while workshops did not generate many pledges, they may have been very effective at increasing knowledge and/or promoting incentive programs. Without data and/or goals to track the success of these non-pledge impacts, understanding their success is limited. Examples of non-pledge metrics could include the number of participants who attended an event, the number of participants who later participated in an incentive program, etc. While the evaluation team can assess some of these findings, it is not possible to compare these results to any pre-determined goals, and therefore judging the success of each outreach effort is limited.

Actively engage community groups to promote the program. To further promote the program, implementers could rely more on community groups to engage customers directly. To do this, implementers would likely need to incentivize community groups to act, through an award or competition of some sort. This method was successfully utilized in the School Energy Competition whereby school leaders were in charge of collecting pledges, rather than the Energy Ambassador. Relying on individual community members to perform community engagement would likely provide the Energy Ambassador with more available time, which could be used to work with multiple communities at once, thereby reaching a larger audience. To some extent, the Energy Ambassador has begun to do this as part of the transition plan to end the program in 2013.

Provide implementers with easy-to-access consumption data. In order for implementers to better understand program impacts and promote program impacts to community members on a timely basis, they need easy access to consumption data. While We Energies was willing to provide this information, it proved challenging to access in real time.

Provide customers with a reminder of their pledge. Participant survey results showed that participants were more likely to carry out their pledge if they were able to remember what they pledged. A third of respondents thought a reminder would be useful, and they most commonly reported wanting to receive an email reminder (47%) or a refrigerator magnet (38%).

Develop a separate pledge card for residential customers and nonresidential customers. The pledge card used by the CEP Program is designed for the residential setting and few actions are transferrable to the nonresidential setting. In order to ensure that businesses can pledge to take actions, We Energies should develop a separate pledge card for nonresidential customers. These pledges might need to be less prescriptive, as businesses tend to have more unique needs requiring custom initiatives.

3

Impact Evaluation Results

This section provides a summary of the analyses that were conducted and their findings as part of the CEP impact evaluation. This section presents:

- Control community selection;
- An analysis of program savings and tracking data;
- Analysis of participant survey results;
- Lessons learned; and
- Conclusions.

3.1 Control Community Selection

To evaluate behavioral energy programs, it is necessary to use quasi-experimental design techniques to ensure that accurate and reasonably unbiased results are estimated and reported. The goal in identifying and selecting a control community is to find a community that is similar to the treatment community, Burlington, Wisconsin. The control community acts as a non-participating baseline to Burlington and represents the energy using activity that would normally occur in the absence of the CEP program. The main criteria for selecting the control community were that it be a small community and relatively similar in size to Burlington, one that was not near a major urban center such as Milwaukee, and that the vast majority of customers in the community receive both electric and gas service from We Energies.

The City of Burlington is a small community in rural Wisconsin. The City has a population of approximately 11,000 people and is not closely connected to any other city or town.[1] It is basically surrounded by farm land. The search for another community concentrated on other communities that are similar in size, remote, and almost entirely made up of We Energies electric and gas customers. Several communities were examined and two were viewed as being potential candidates.

[1] Program tracking data does not clearly identify whether a customer account is located in the City of Burlington or the greater Burlington area. For the purposes of this analysis, the Burlington participant community is defined as the greater area within the Burlington zip code (53105) rather than the smaller area of the City of Burlington.

The control community chosen for this evaluation is Watertown, Wisconsin. Even though it has a significantly larger population (approximately 23,000) it is believed to have very similar characteristics to those of Burlington. Numerous characteristics were examined such as population makeup (gender, race, ethnicity, etc.), persons per household, proximity to a large metropolitan area, and education levels. However, in spite of these precautions, it should be noted that comparisons between any two communities are imperfect at best, and any conclusions drawn from such comparisons are inherently limited.

3.2 Analysis of Program Savings

We Energies and Focus on Energy offered incentives to households and businesses within Wisconsin. We Energies offers these throughout their entire service territory and Focus on Energy offers them throughout the entire state. Most of the incentive programs offered by We Energies ceased in 2012. The evaluation team has collected tracking data for those program participants that are located in both Burlington and the control community of Watertown. These records have been analyzed so as to estimate the net energy savings associated with these programs within Burlington.

3.2.1 Methodology

There are a number of energy efficiency (EE) programs available to the community members in both Burlington and the control community. The majority of these programs are implemented by We Energies and Focus on Energy. These EE programs have been promoted for a number of years and the deemed program savings (measures installed and their associated ex ante energy savings) are tracked using computerized tracking databases maintained by the program implementers. These figures are the deemed savings and impacts and do not represent verified gross or net savings.[2] Also, this analysis assumes that the deemed savings from the tracking database are weather normalized, in the sense that these savings are calculated under normal weather conditions and do not reflect actual or predicted weather conditions.

Tracking data was obtained for all of the energy efficiency programs offered by We Energies and Focus on Energy. The deemed savings for both electric and natural gas measures were summed by quarter. The level of savings prior to the start of the CEP (the baseline) was compared to the level of savings after the start of the program. The percent change in the program savings was then compared to that of the control community to estimate the percent savings attributable to the CEP Program. This type of analysis is referred to as a difference-in-differences analysis and provides an estimate of net energy savings. If a control community was not used, the analysis would only provide a gross savings estimate.

[2] Deemed savings are used for tracking purposes with the assumption that they would subsequently be verified. No verification activities have been conducted on behalf of this evaluation; therefore program savings are ex ante estimates and do not represent actual verified savings.

The equation for the difference-in-differences analysis is as follows:

$$\%NetDeemedSavings = \frac{(Post_T - Pre_T)}{Pre_T} - \frac{(Post_C - Pre_C)}{Pre_C}$$

Where:

- *%NetDeemedSavings* is the net percent change in deemed energy savings between the treatment and control communities
- $Post_T$ is the post CEP kick-off program deemed savings within the Treatment Community
- Pre_T is the pre CEP kick-off, or baseline, program deemed savings within the Treatment Community
- $Post_C$ is the post CEP kick-off program deemed savings within the Control Community
- Pre_C is the pre CEP kick-off, or baseline, program deemed savings within the Control Community

The percent change in savings instead of the absolute change in savings is used to normalize for any size differences and, therefore, any overall relative program savings differences between the treatment and control communities.

The First-Year Evaluation Report included a billing analysis component, which was inconclusive and therefore not revisited for the Final Evaluation Report. The original intention of the billing analysis was to measure and compare actual energy usage between the participant and control communities, but the lack of sufficient billing data precluded a statistically significant analysis.[3] The evaluation team also considered measuring program impacts by matching pledge cards information with billing data, but this activity was rejected due to the lack of common contact information between the two data sources.

3.2.2 Tracking Program Energy Savings

Tracking data from We Energies and Focus on Energy were gathered for the three years of CEP Program savings starting in Q3 2010 and ending in Q2 2013. The tracking data was segmented by gas program savings, in which deemed Therm savings are presented, and by electric program savings, in which deemed energy (kWh) savings and demand (kW) impacts are presented.

[3] For the billing analysis, less than full-year of pre-program billing data was available for most customer accounts. To achieve better estimation, at least one whole pre-program year and one whole post-program year of data is needed. Also, the analysis was also limited due to the relatively small sample sizes of complete billing data given the expected size of the savings.

3.2.3 Burlington Program Savings

The residential[4] deemed gas savings for Burlington over these three years is 29,644 therms, as shown in Table 3-1. The table shows the ramping down of We Energies program activity beginning in late 2012, and an increase in Focus on Energy program activity during the same time period.

Table 3-1: Residential: Deemed Therm Savings by Delivery Provider, Burlington

Period	Delivery Provider	Deemed Savings (therms)
Year 1 Q3 2010 – Q2 2011	We Energies	5,363
	Focus on Energy	4,596
Year 2 Q3 2011 – Q2 2012	We Energies	1,510
	Focus on Energy	3,221
Year 3 Q3 2012 – Q2 2013	We Energies	37
	Focus on Energy	14,917
Total (3 years)	**Combined**	**29,644**

Table 3-2 shows that three years of combined residential program activity in Burlington produced 337,042 kWh of deemed electric savings and 86.9 kW of deemed impacts.

Table 3-2: Residential: Deemed kWh Savings and kW Impacts by Delivery Provider, Burlington

Period	Delivery Provider	Deemed Savings (kWh)	Deemed Impacts (kW)
Year 1 Q3 2010 – Q2 2011	We Energies	48,702	6.5
	Focus on Energy	107,861	29.3
Year 2 Q3 2011 – Q2 2012	We Energies	60,300	4.5
	Focus on Energy	27,543	8.5
Year 3 Q3 2012 – Q2 2013	We Energies	-	-
	Focus on Energy	92,636	38.0
Total (3 years)	**Combined**	**337,042**	**86.9**

Table 3-3 shows that three years of commercial program activity in Burlington produced 151,471 therms of deemed gas savings. Savings figures vary greatly from year-to-year, as a few large commercial projects may have greatly influenced the number of therms savings in a given time period.

[4] Residential program savings include savings from multi-family programs as well as those from single family programs.

Table 3-3: Commercial: Deemed Therm Savings by Delivery Provider, Burlington

Period	Delivery Provider	Deemed Savings (therms)
Year 1 Q3 2010 – Q2 2011	We Energies	8,287
	Focus on Energy	61,803
Year 2 Q3 2011 – Q2 2012	We Energies	8,045
	Focus on Energy	43,748
Year 3 Q3 2012 – Q2 2013	We Energies	11,316
	Focus on Energy	18,271
Total (3 years)	**Combined**	**151,471**

Table 3-4 shows that three years of combined commercial program activity in Burlington produced 4,602,515 kWh of deemed electric savings and 737.4 kW of deemed impacts.

Table 3-4: Commercial: Deemed kWh Savings and kW Impacts by Delivery Provider, Burlington

Period	Delivery Provider	Deemed Savings (kWh)	Deemed Impacts (kW)
Year 1 Q3 2010 – Q2 2011	We Energies	576,578	102.2
	Focus on Energy	663,299	144.9
Year 2 Q3 2011 – Q2 2012	We Energies	246,217	75.1
	Focus on Energy	1,177,442	124.4
Year 3 Q3 2012 – Q2 2013	We Energies	-	-
	Focus on Energy	1,938,979	290.8
Total (3 years)	**Combined**	**4,602,515**	**737.4**

3.2.4 Burlington Pre-Post Differenced Savings

To determine whether the CEP Program has influenced community members to participate in incentive programs, tracking data was compared to a baseline of savings within Burlington. Tracking data was collected for We Energies and Focus on Energy for the two years prior to the start of the CEP. In order to smooth out quarterly variations in the data and to levelize any economic changes that might have influenced program savings, pre-program tracking data was averaged by quarter. Thus, the Q3 baseline is the average of Q3 2008 and Q3 2009; the Q4 baseline is the average of Q4 2008 and Q4 2009; the Q1 baseline is the average of Q1 2009 and Q1 2010; and the Q2 baseline is the average of Q2 2009 and Q2 2010. The analysis does not directly make adjustments for changes in the funding levels of the two energy efficiency program providers, funding, and activity levels. However, the use of a control community ensures that such changes are indirectly accounted for.

In the following tables the deemed residential savings and impacts during the three-year program period are compared to the deemed savings and impacts of the baseline period. Deemed post

savings and impacts are the deemed savings and impacts that resulted from We Energies and Focus on Energy incentive programs during the CEP program period (Q3 2010 – Q2 2013). Baseline savings and impacts are the measured savings and impacts that occurred during the baseline period (Q2 2008 to Q2 2010). Differenced savings represent deemed post savings minus baseline savings. Deemed post savings, baseline savings, and differenced savings are ex ante savings and do not represent verified gross savings. Table 3-5 indicates that the residential programs in Burlington from Q3 2010 through Q2 2013 resulted in 4,772 additional therms of gas savings compared to savings during the baseline period.

Table 3-5: Deemed Post Therms Savings minus Baseline Therm Savings (Residential)

Period	Delivery Provider	Deemed Post Savings (therms)	Baseline Savings (therms)	Differenced Savings (therms)
Year 1 Q3 2010 – Q2 2011	Combined	9,959	11,472	(1,513)
Year 2 Q3 2011 – Q2 2012	Combined	4,731	11,472	(6,741)
Year 3 Q3 2012 – Q2 2013	Combined	14,954	11,472	3,482
Total (3 years)	**Combined**	**29,644**	**34,416**	**(4,772)**

Table 3-6 and Table 3-7 indicate that the residential programs resulted in negative 119,813 kWh of electric savings and negative 6.1 kW of impacts during the CEP period compared to the baseline period. These negative results may reflect the winding down of We Energies EE program activity in Year 2 and Year 3. Alternatively, these results may suggest that the CEP Program was not effective in driving participation in EE programs overall.

Table 3-6: Deemed Post kWh Savings minus Baseline kWh Savings (Residential)

Period	Delivery Provider	Deemed Post Savings (kWh)	Baseline Savings (kWh)	Differenced Savings (kWh)
Year 1 Q3 2010 – Q2 2011	Combined	156,563	152,285	4,278
Year 2 Q3 2011 – Q2 2012	Combined	87,843	152,285	(64,442)
Year 3 Q3 2012 – Q2 2013	Combined	92,636	152,285	(59,649)
Total (3 years)	**Combined**	**337,042**	**456,855**	**(119,813)**

Table 3-7: Deemed Post kW Impacts minus Baseline kW Impacts (Residential)

Period	Delivery Provider	Deemed Post Impacts (kW)	Baseline Impacts (kW)	Differenced Impacts (kW)
Year 1 Q3 2010 – Q2 2011	Combined	35.8	31.0	4.8
Year 2 Q3 2011 – Q2 2012	Combined	13.1	31.0	(17.9)
Year 3 Q3 2012 – Q2 2013	Combined	38.0	31.0	7.0
Total (3 years)	**Combined**	**86.9**	**93.0**	**(6.1)**

The following tables compare commercial program savings and impacts during the three-year CEP program period to the baseline period. Table 3-8 shows that commercial programs resulted in negative 33,246 therms of savings as compared to the savings produced during the baseline period. A negative savings figure indicates that program savings during the CEP period was less than program savings during the baseline period. This result may suggest that the CEP was not effective in driving commercial customers to We Energies and Focus on Energy gas programs.

Table 3-8: Deemed Post Therm Savings minus Baseline Therm Savings (Commercial)

Period	Delivery Provider	Deemed Post Savings (therms)	Baseline Savings (therms)	Differenced Savings (therms)
Year 1 Q3 2010 – Q2 2011	Combined	70,091	61,572	8,519
Year 2 Q3 2011 – Q2 2012	Combined	51,793	61,572	(9,779)
Year 3 Q3 2012 – Q2 2013	Combined	29,587	61,572	(31,985)
Total (3 years)	**Combined**	**151,471**	**184,717**	**(33,246)**

Table 3-9 and Table 3-10 indicate that commercial programs produced 1,443,218 kWh of electric savings and 80.4 kW of impacts during the CEP period compared to the baseline period. These results suggest that the CEP program had a positive effect on the deemed electric savings and impacts of the commercial programs offered by We Energies and Focus on Energy.

Table 3-9: Deemed Post kWh Savings minus Baseline Therm Savings (Commercial)

Period	Delivery Provider	Deemed Post Savings (kWh)	Baseline Savings (kWh)	Differenced Impacts (kWh)
Year 1 Q3 2010 – Q2 2011	Combined	1,239,877	1,053,099	186,778
Year 2 Q3 2011 – Q2 2012	Combined	1,423,659	1,053,099	370,560
Year 3 Q3 2012 – Q2 2013	Combined	1,938,979	1,053,099	885,880
Total (3 years)	**Combined**	**4,602,515**	**3,159,297**	**1,443,218**

Table 3-10: Deemed Post kW Impacts minus Baseline kW Impacts (Commercial Programs)

Period	Delivery Provider	Deemed Post Impacts (kW)	Baseline Impacts (kW)	Differenced Impacts (kW)
Year 1 Q3 2010 – Q2 2011	Combined	247.1	219.0	28.1
Year 2 Q3 2011 – Q2 2012	Combined	199.4	219.0	(19.6)
Year 3 Q3 2012 – Q2 2013	Combined	290.8	219.0	71.8
Total (3 years)	**Combined**	**737.4**	**657.0**	**80.4**

3.2.5 Burlington Deemed Net Program Savings

In order to estimate deemed net savings, the change in the Burlington deemed energy savings and impacts was compared to the change in Watertown deemed energy savings. Thus, deemed net program savings are determined by the change in savings from baseline for the treatment community (Burlington), minus the change in savings from baseline of the control community (Watertown). To account for the population difference between the two communities, the change in savings is normalized by expressing the change from baseline as a percentage change relative to the baseline. The result is the net percentage change in program savings relative to what would have happened if the CEP had not been implemented. The net change in savings takes into account factors such as the economy, mass market advertising, free-ridership,[5] the influence of federal energy tax credits, other unseen factors that affect incentive program activity across the two communities such as funding levels.

[5] Free-ridership is the fraction of those who participate in an energy efficiency incentive program that would have purchased an energy efficient appliance or end-use even without the incentive.

Table 3-11 indicates a net increase of 18% in deemed Therm savings over the three-year program period for residential programs, including multifamily programs. Table 3-12 and Table 3-13 indicate a 22% increase in deemed net kWh savings and a 3% decrease in deemed net kW impacts. These figures mean that Burlington saved 18% more therms, 22% more kWh, but 3% less kW over its baseline than did Watertown.

Table 3-11: Net % Change in Therm Savings, We Energies and Focus on Energy Residential Programs

Period	Burlington % Change in Therm Savings	Watertown % Change in Therm Savings	Net % Change in Therm Savings
Year 1 Q3 2010 – Q2 2011	(12%)	34%	(46%)
Year 2 Q3 2011 – Q2 2012	(59%)	(64%)	5%
Year 3 Q3 2012 – Q2 2013	30%	(76%)	106%
Total (3 years)	**(14%)**	**(32%)**	**18%**

Table 3-12: Net % Change in kWh Savings, We Energies and Focus on Energy Residential Programs

Period	Burlington % Change in kWh Savings	Watertown % Change in kWh Savings	Net % Change in kWh Savings
Year 1 Q3 2010 – Q2 2011	2%	13%	(11%)
Year 2 Q3 2011 – Q2 2012	(42%)	(63%)	21%
Year 3 Q3 2012 – Q2 2013	(39%)	(97%)	58%
Total (3 years)	**(26%)**	**(48%)**	**22%**

Table 3-13: Net % Change in kW Impacts, We Energies and Focus on Energy Residential Programs

Period	Burlington % Change in kW Impacts	Watertown % Change in kW Impacts	Net % Change in kW Impacts
Year 1 Q3 2010 – Q2 2011	13%	84%	(71%)
Year 2 Q3 2011 – Q2 2012	(58%)	(50%)	(8)%
Year 3 Q3 2012 – Q2 2013	22%	(67%)	89%
Total (3 years)	**(7%)**	**(4%)**	**(3)%**

Table 3-14 shows that the commercial sector experienced a 5% increase in net natural gas program savings during the three year CEP program period. Table 3-15 and Table 3-16 indicate that the commercial sector experienced a 122% percent increase in net kWh savings and an 86% increase in net kW impacts. These figures mean that Burlington saved 5% more therms, 122% more kWh and 86% more kW over its baseline than did Watertown. These results demonstrate a correlation between the CEP and an overall increase in commercial net program savings.

Table 3-14: Net % Change in Therm Savings, We Energies and Focus on Energy Commercial Programs

Period	Burlington % Change in Therm Savings	Watertown % Change in Therm Savings	Net % Change in Therm Savings
Year 1 Q3 2010 – Q2 2011	14%	0%	14%
Year 2 Q3 2011 – Q2 2012	(16%)	(51%)	35%
Year 3 Q3 2012 – Q2 2013	(52%)	(17%)	(35%)
Total (3 years)	**(18%)**	**(23%)**	**5%**

Table 3-15: Net % Change in kWh Savings, We Energies and Focus on Energy Commercial Programs

Period	Burlington % Change in kWh Savings	Watertown % Change in kWh Savings	Net % Change in kWh Savings
Year 1 Q3 2010 – Q2 2011	15%	(50%)	66%
Year 2 Q3 2011 – Q2 2012	35%	(82%)	117%
Year 3 Q3 2012 – Q2 2013	84%	(88%)	172%
Total (3 years)	**46%**	**(76%)**	**122%**

Table 3-16: Net % Change in kW Impacts, We Energies and Focus on Energy Commercial Programs

Period	Burlington % Change in kW Impacts	Watertown % Change in kW Impacts	Net % Change in kW Impacts
Year 1 Q3 2010 – Q2 2011	10%	(52%)	61%
Year 2 Q3 2011 – Q2 2012	(9%)	(81%)	72%
Year 3 Q3 2012 – Q2 2013	33%	(80%)	113%
Total (3 years)	**12%**	**(74%)**	**86%**

In order to demonstrate the total effect of the program in the community, energy savings are combined across the residential and commercial sectors to calculate the combined net effect of the CEP Program. Over the three-year program period, the CEP correlates with an 8% increase in net therms savings (Table 3-17), a 109% increase in net kWh savings (Table 3-18), and a 78% increase in net kW impacts (Table 3-19). These figures mean that Burlington saved 8% more therms, 109% more kWh and 78% more kW over its baseline than did Watertown.

Table 3-17: Net % Change in Therm Savings, We Energies and Focus on Energy Residential & Commercial Programs

Period	Burlington % Change in Therm Savings	Watertown % Change in Therm Savings	Net % Change in Therm Savings
Year 1 Q3 2010 – Q2 2011	9%	11%	(2%)
Year 2 Q3 2011 – Q2 2012	(23%)	(55%)	33%
Year 3 Q3 2012 – Q2 2013	(39%)	(35%)	(4%)
Total (3 years)	**(17%)**	**(26%)**	**8%**

Table 3-18: Net % Change in kWh Savings, We Energies and Focus on Energy Residential & Commercial Programs

Period	Burlington % Change in kWh Savings	Watertown % Change in kWh Savings	Net % Change in kWh Savings
Year 1 Q3 2010 – Q2 2011	14%	(41%)	55%
Year 2 Q3 2011 – Q2 2012	25%	(79%)	104%
Year 3 Q3 2012 – Q2 2013	69%	(89%)	158%
Total (3 years)	**37%**	**(72%)**	**109%**

Table 3-19: Net % Change in kW Impacts, We Energies and Focus on Energy Residential & Commercial Programs

Period	Burlington % Change in kW Impacts	Watertown % Change in kW Impacts	Net % Change in kW Impacts
Year 1 Q3 2010 – Q2 2011	10%	(39%)	50%
Year 2 Q3 2011 – Q2 2012	(15%)	(78%)	63%
Year 3 Q3 2012 – Q2 2013	32%	(79%)	111%
Total (3 years)	**10%**	**(68%)**	**78%**

3.2.6 Key Findings from Tracking Data Analysis

Here are the highlights from the analysis of the tracking data provided by the We Energies and Focus on Energy programs:

- **Residential Programs.** The CEP program period correlated with a net increase of 18% in deemed Therm savings, and 22% in deemed kWh savings, but a net decrease of 3% in deemed kW impacts.
- **Commercial Programs.** The CEP program period correlated with a net increase of 5% in deemed Therm savings, 122% in deemed kWh savings, and 86% in deemed kW impacts for commercial programs.
- **All Programs.** The CEP program period correlated with a net increase of 8% in deemed Therm savings, 109% in deemed kWh savings, and 78% in deemed kW impacts.

3.3 Survey Results

The surveys sought to measure and establish the attitudes, beliefs and behaviors of the CEP treatment and control communities. These surveys are used to measure the three stages[6] of behavior change adoption based on self-reports from customers within the treatment community (Burlington) and the control community (Watertown). The stages of adoption are 1) awareness of the need to change energy consuming behavior and awareness of the program and its messages, 2) awareness of specific behavior changes that can effect energy savings, and 3) belief that the benefits of the energy saving behavior changes outweigh the effort and/or cost to undertake them.

3.3.1 Methodology

Telephone survey instruments were developed for the mass markets (residential and small commercial) within the treatment and control communities. These surveys were conducted by Itron's computer assisted telephone interviewing (CATI) center. The survey instruments appear in Appendices C and D.

The surveys were conducted at two stages during the program: once during the October 2010-May 2011 time period, which was shortly after the CEP program was launched and a second time in July 2013 as the program neared its conclusion. To provide continuity of sample across the two survey periods, the later survey effort attempted to contact previous respondents to the greatest extent possible.

The sample design for the surveys used a three-by-three matrix of strata: three energy-use strata (small, mid, and large end-user) and three customer type strata. Also, the 2013 survey effort sought to replicate the strata dimensions of the 2010/2011 survey effort as closely as possible.

The customer type strata for the residential population are based on Nielsen's Lifestage Groups.[7] The Lifestage Groups are classified by one of three primary categories of age-and-children combinations:

- **Younger Years:** Largely under age 35, these households have few–if any–children. Households tend to be singles, although there are also couples that fall into this Lifestage.
- **Family Life:** Households with kids meet the primary criteria for this Lifestage. While the householder age range is broad – 25 to 54 – and there are some couples that fall into this Lifestage, the vast majority of households have at least one child under 18.
- **Mature Years:** Largely over age 45, these are largely empty–nest households.

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6 *Making the Intangible Tangible: How to Evaluate a Social Marketing Campaign*. Sharyn Barata and Chris Anderson. 2007 Energy Program Evaluation Conference, Chicago, IL.

7 http://www.tetrad.com/pub/prices/PRIZMNE_Clusters.pdf

A summary of completed residential surveys is presented by strata in Table 3-20.

Table 3-20: Residential Surveys Completed

Life Stage Group	Burlington		Watertown	
	2010/2011	2013	2010/2011	2013
Younger Years	202 (34%)	205 (34%)	69 (44%)	69 (44%)
Family Life	182 (31%)	187 (31%)	66 (42%)	66 (42%)
Mature Years	203 (34%)	205 (34%)	21 (14%)	22 (14%)
Total	**587**	**597**	**156**	**157**

The Commercial population was limited to just small commercial customers. This was done for a few reasons. First, a phone survey is much easier to implement with a small more homogeneous population. Second, the persons responding to the survey are more likely to be local and familiar with activities within the community. The commercial sample was restricted to those accounts that had an annual consumption of 585,000 kWh or less so as to limit the survey to the broader "mass market" segment of the commercial population.[8]

The small commercial customer types were based on building classifications. The assignment to a building classification was based on the customer's SIC code. Three broad groupings were used:

- Offices,
- Services, and
- Miscellaneous.

The same stratification design was overlaid on the control community in selecting a matched control group sample. A summary of completed commercial surveys is presented by strata in Table 3-21.

[8] This restriction does not limit the extrapolation of survey results, as 0% of customers surpassed the 585,000 kWh threshold.

Table 3-21: Commercial Surveys Completed

Building Type Group	Burlington		Watertown	
	2010/2011	2013	2010/2011	2013
Misc.	59 (39%)	60 (39%)	18 (26%)	18 (26%)
Office	56 (37%)	57 (37%)	31 (45%)	32 (46%)
Services	37 (24%)	37 (24%)	20 (29%)	20 (29%)
Total	**152**	**154**	**69**	**70**

3.3.2 Residential Survey Results

The survey focused on four areas of questioning; attitudes/beliefs, awareness, participation and behavior. The following paragraphs and figures show some of the more interesting and significant findings. Complete survey results appear in Appendices E and F.

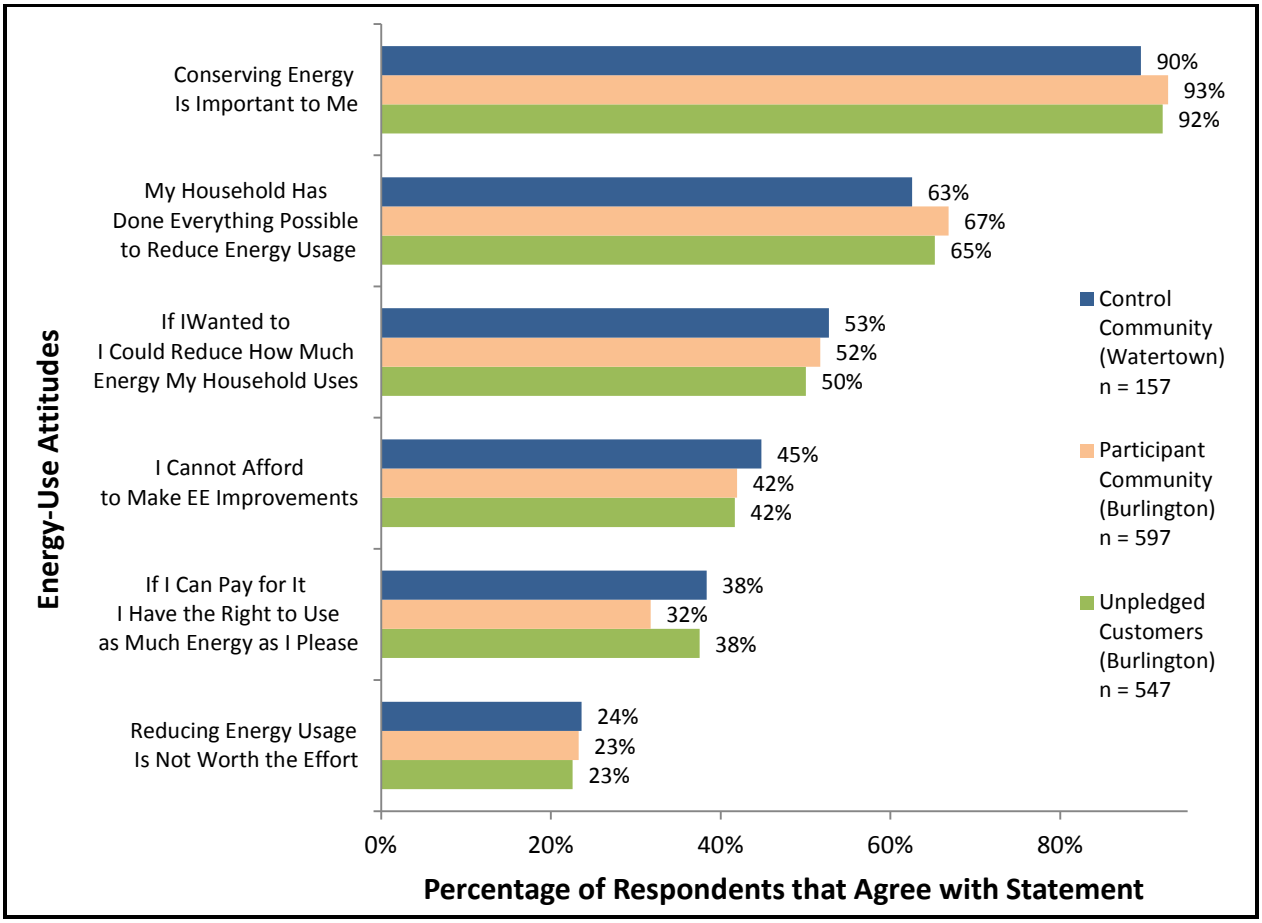
Residential Attitudes and Beliefs

The survey sought to characterize how attitudes and beliefs towards energy efficiency and conservation compared between the participant community and the control community. To determine the effect of the program on the participant community, attitudes are compared across three respondent categories: 1) respondents in the control community of Watertown; 2) all respondents in the participant community of Burlington; and 3) Burlington respondents who did not make the pledge to save energy. The inclusion of this third group is to determine the effect of the program on customers who did not directly participate in the program, but were likely exposed to program marketing.

Figure 3-1 summarizes the percentage of customers that agreed with each energy-use attitude or belief.[9] The majority of respondents in all three categories agreed that energy conservation is important and that it is worth the effort to reduce energy usage. A minority of respondents felt entitled to use as much energy as they could afford and that energy reduction is not worth the effort. Also, while respondents in the participant community were more likely to believe that they had done everything possible to reduce energy consumption, they were less likely to believe that they could further reduce energy consumption and that they could afford to make energy-efficiency improvements. However, given the small sample size, the differences in percentages are small enough that these results may not be statistically significant.

[9] Respondents were presented with a statement regarding energy-usage asked to state how much they agreed with these attitudes on a 1 to 10 scale. However, a scalar analysis of customer responses provided little additional insight, so responses are summarized as a percentage of customers that agree with each statement. A response of 6 or higher represented agreement with the statement presented. Also, no noteworthy trends were observed by customer type, so the results are not presented here.

Figure 3-1: Summary of Residential Customer Attitudes and Beliefs



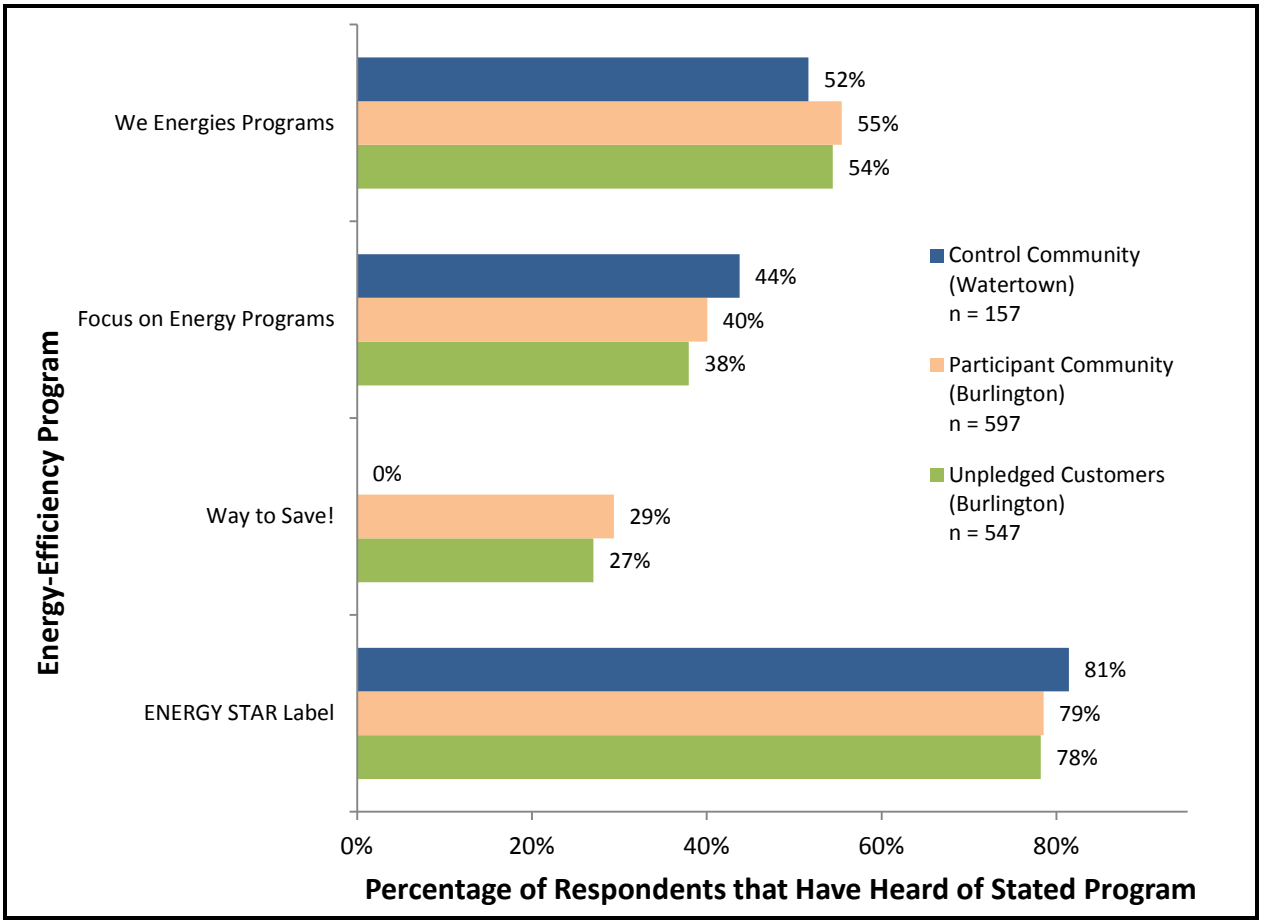
Residential Awareness

The survey sought to characterize customer awareness of the We Energies and Focus on Energy incentive programs, the *Way to Save, Burlington!* initiative, and the ENERGY STAR label for appliances. Respondents were asked to rate their familiarity with these resources with one of the following survey responses: "*I have not heard of this and don't know anything about it*;" "*I have heard of this but don't know much*;" or "*I have heard of this and know a lot about this*."[10] Figure 3-2 summarizes customer awareness among the control community, the participant community and unpledged customers in the participant community. While respondents in the participant community demonstrated more awareness of We Energies incentive programs, they demonstrated less awareness of the Focus on Energy and ENERGY STAR programs than their counterparts in the control community. Respondents in the control community were not asked to

[10] For the sake of clarity, Figure 3-2 does not present results by each of these three responses. The responses "I have heard of this but don't know much" and "I have heard of this and I know a lot about this" have been gathered under a single response, "I have heard of this." Responses are presented with more specificity in the appendices.

comment on the *Way to Save, Burlington!* program. These observations suggest that the CEP Program has not been effective in raising awareness of Focus on Energy programs among residential customers in the participant community. However, even though the control community demonstrated greater awareness of Focus on Energy programs in 2013, the next paragraphs will show that the participant community has experienced a greater increase in awareness since the program's launch in 2010.

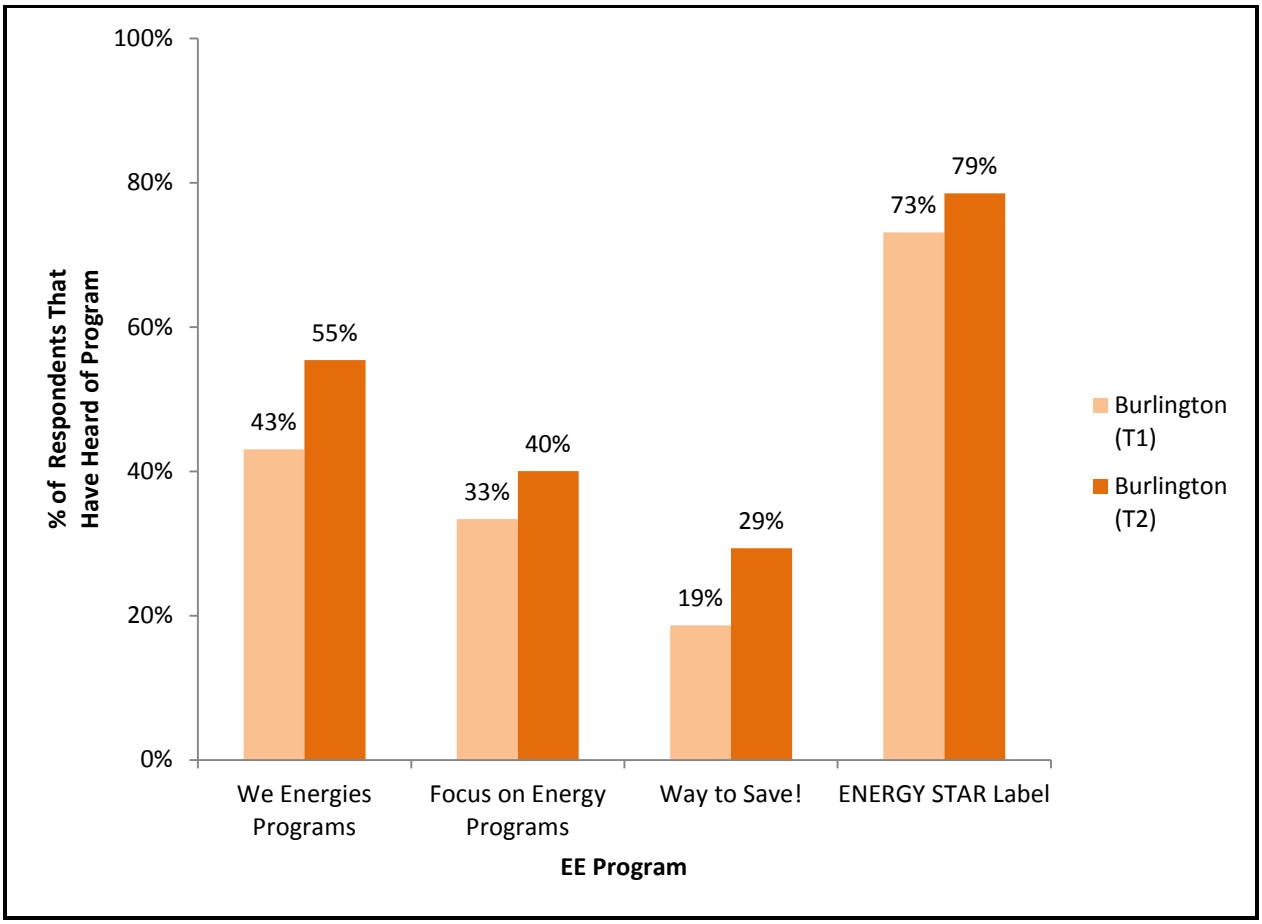
Figure 3-2: Summary of Residential Customer Awareness



To illustrate how awareness has progressed since the program's launch, the responses from the first survey effort conducted in 2010/2011(T1) are compared with the responses from the second survey effort conducted in 2013 (T2). Figure 3-3 compares T1 and T2 results for the participant community and Figure 3-4 compares T1 and T2 results for the control community. Survey results indicate that customer awareness of all programs except ENERGY STAR has increased in both communities since the start of the CEP Program. Awareness of Focus on Energy programs increased by a slightly greater extent in the participant community (7%) as compared to the control community (4%), thus suggesting that the CEP Program has had some impact on

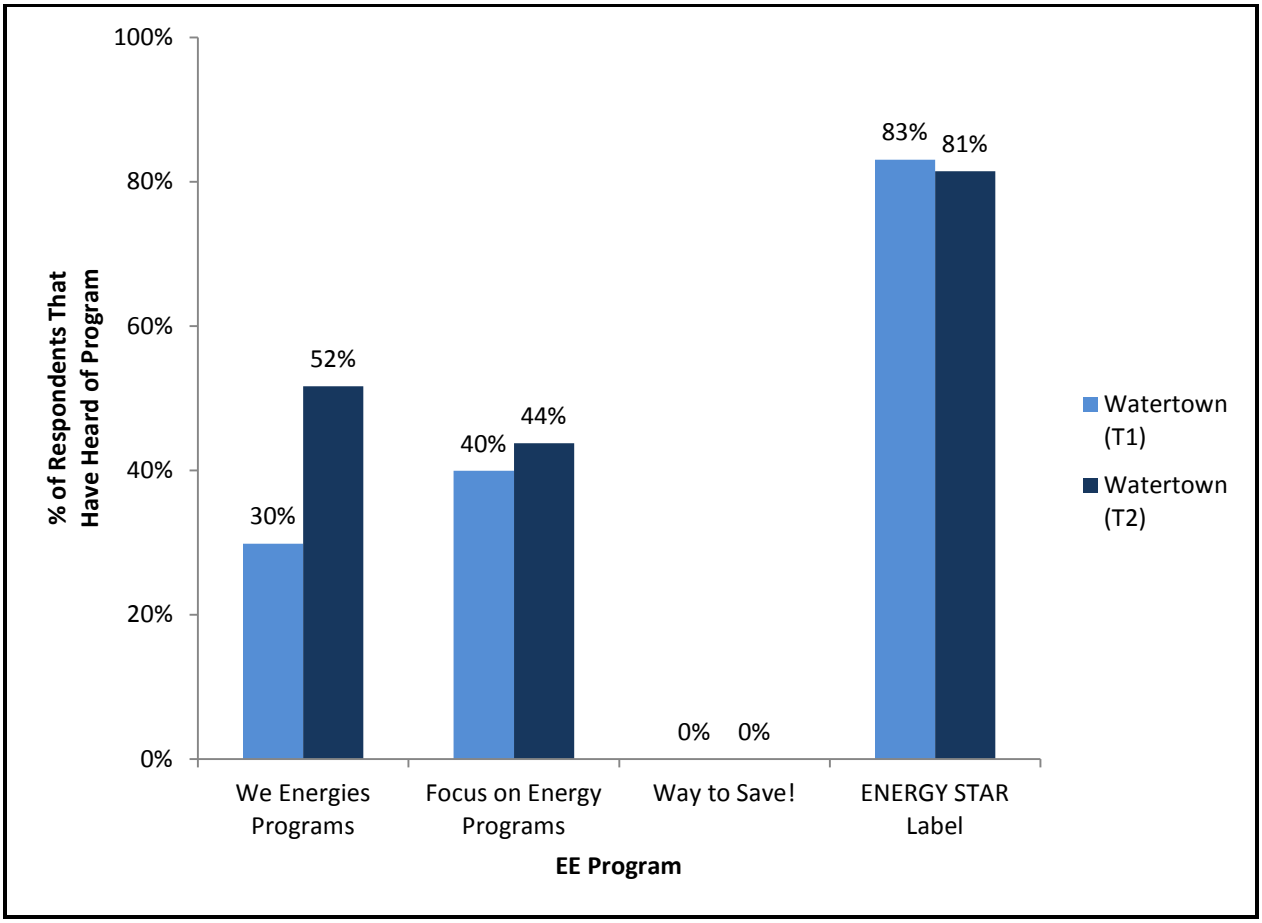
raising awareness of Focus on Energy programs in the participant community,[11] even though Figure 3-2 shows that overall awareness levels are greater in the control community. However, given the small sample size, the differences in percentages are small enough that these results may not be statistically significant.

Figure 3-3: Residential Customer Awareness since Program Launch, Burlington



[11] Even though the survey responses presented here are expressed in terms of percentage, the original response data was either scalar (1-10) or categorical ("I know a lot about this;" "I don't know much;" "I don't know anything"). Such responses are somewhat subjective and as a result, not suited for a difference-in-differences approach.

Figure 3-4: Residential Customer Awareness since Program Launch, Watertown



The survey results also indicated that while customer awareness of the *Way to Save, Burlington!* campaign has increased in the past few years, awareness among the general population of Burlington was modest, as only 29% of respondents have heard of the program. This is noteworthy because a deeper analysis of survey results shows that 50% the Burlington respondents who pledged also indicated that they have never heard of *Way to Save, Burlington!* This result suggests that customers do not necessarily associate the pledge to save energy with the *Way to Save, Burlington!* brand.

Customers were also asked how they first learned about the Way to Save, Burlington! responses indicate that the most commonly encountered marketing channels varied according to customer type. These principal marketing channels were: public billboard displays (for mature and youth customer groups), and advertisements in the Burlington Standard (for the family customer group). To a lesser extent, community events (including school functions) were also cited as source of awareness among all customer groups.

Residential Participation

In terms of participation, the only goal of the survey was to determine to what extent respondents participated in Focus on Energy programs. The percentage of customers who participated in a Focus on Energy rebate program was identical among respondents in the participant and control communities (8%). Also, only 7% of unpledged Burlington respondents indicated that they had participated in a Focus on Energy program. These observations do not support to the premise that the CEP Program drives customer participation in Focus on Energy incentive programs.

Residential Behaviors

The survey sought to characterize to what extent residential customers have adopted energy-efficient behavior and what barriers prevent them from doing so. Figure 3-5 and Figure 3-6 compare the adoption rates of energy-efficient behavior from the first survey effort (T1) to the second survey effort (T2).[12] While the largest gains in energy efficient behavior were observed among Burlington residents who reported purchasing an energy-efficient water heater, furnace, or air conditioner, Watertown residents were still more likely to have adopted all types of energy-efficient behaviors, except for setting the thermostat to 68 in the winter.

A comparative analysis between the control group and the group of Burlington residents who did not pledge to save energy revealed that Watertown residents were slightly more likely to have already implemented certain energy-efficient behaviors. Watertown residents were more likely have reported installing insulation, purchasing an efficient furnace, purchasing an efficient water heater, installing CFLs, and turning off the lights when not needed.

[12] Unpledged Burlington respondents are not included in this analysis because at the time of the first survey effort (T1) very few respondents had made the pledge to save energy.

Figure 3-5: Adopted Residential Behaviors since Program Launch, Burlington

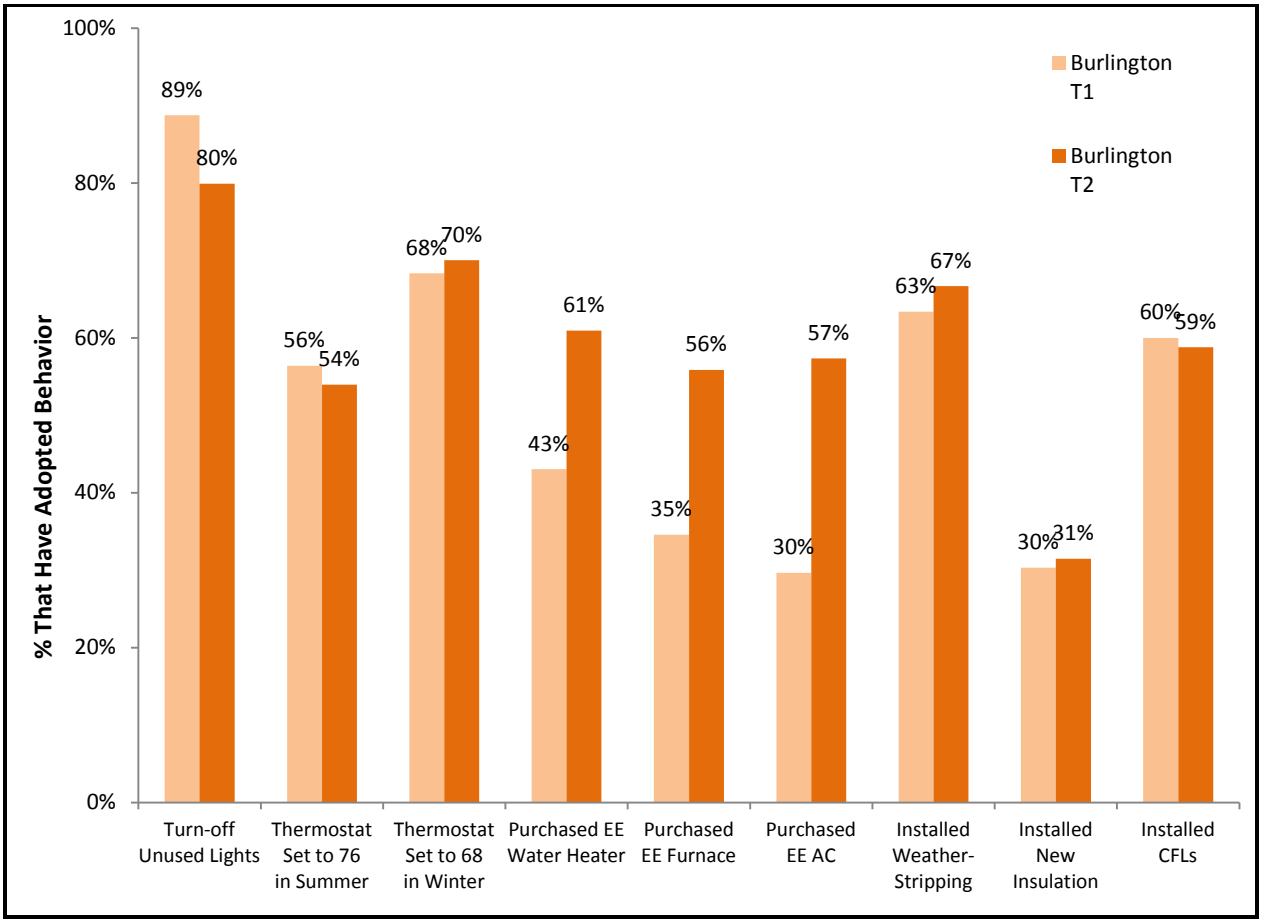
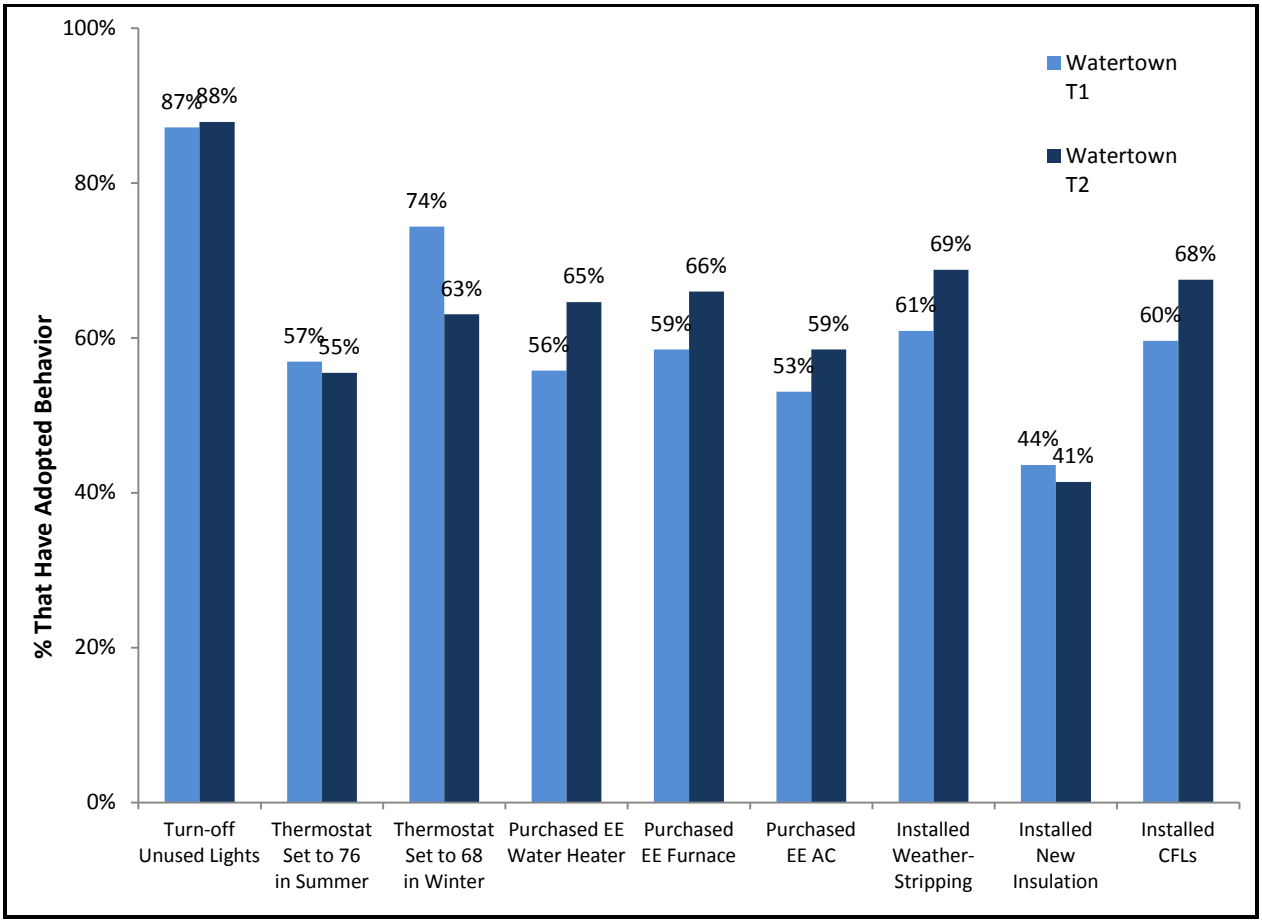


Figure 3-6: Adopted Residential Behaviors since Program Launch, Watertown



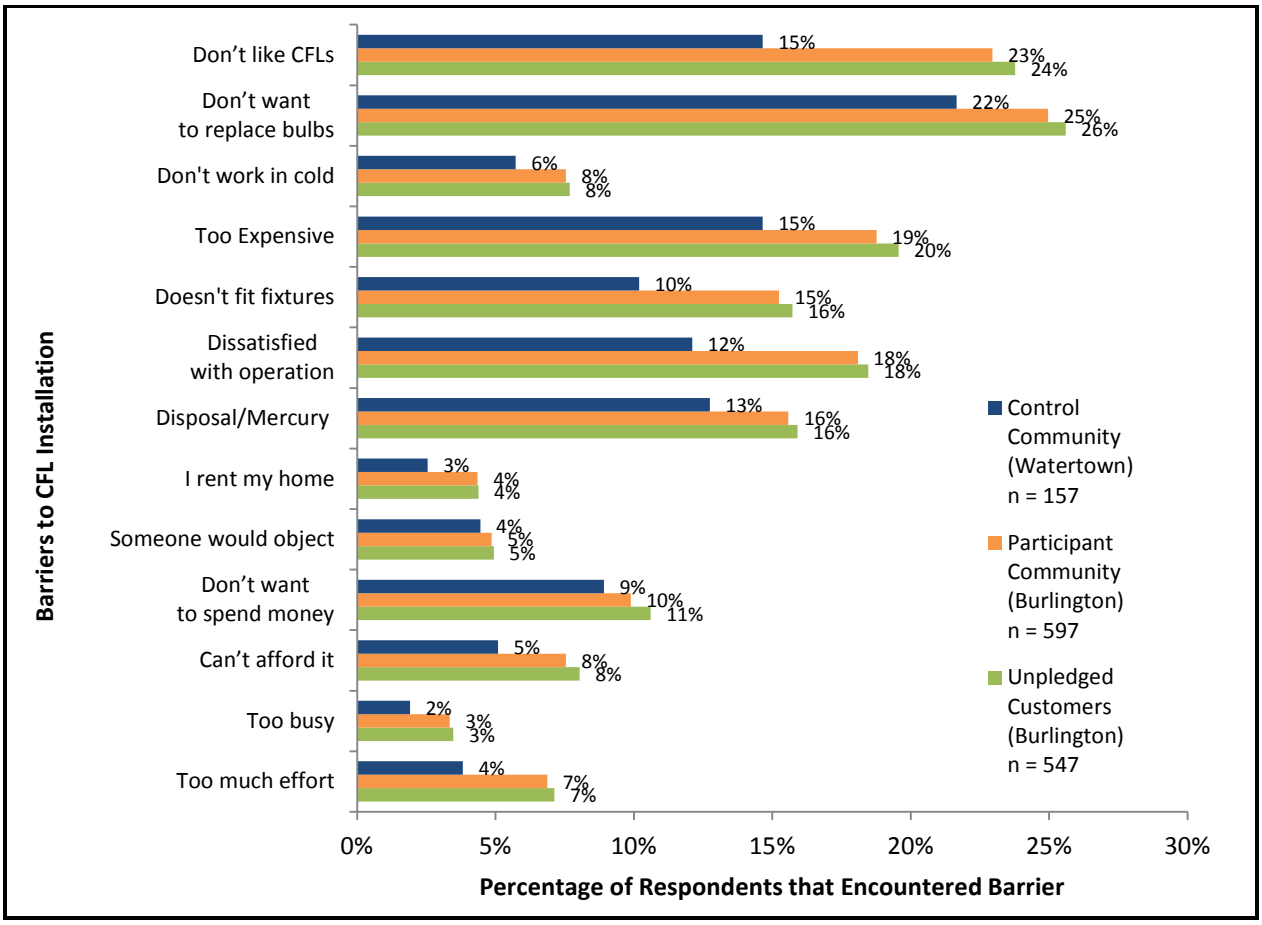
In regards to barriers, respondents sometimes had the opinion that if an old appliance still works, it does not require replacement. This behavior suggests that customers are unaware of the energy- and money-saving potential of retiring an old inefficient appliance with a new energy-efficient appliance. Other common barriers were comfort preferences, especially in regards to thermostat settings, and satisfaction with the current equipment. Table 3-22 lists some of most common objections to energy-efficient behavior. In general, responses of customers in the participant community were comparable to the responses of customers in the control community. Complete results for barriers to energy-efficient behaviors may be found in the appendices.

Table 3-22: Most Common Objections to Energy-Efficient Behaviors

Behavior	Objection	% of Burlington Respondents (n = 597)	% of Watertown Respondents (n = 157)
Install new insulation	Don't need it	32%	27%
Weather-stripping	Don't need it	12%	9%
Efficient furnace	Current equipment still works	23%	14%
Efficient AC	Current equipment still works	25%	26%
Efficient water heater	Current equipment still works	25%	22%
Install CFLs	Don't want to replace bulbs that still work	25%	22%
Turn-off lights	Security concerns	10%	7%
Set thermostat to 68 (in winter)	Comfort preference	24%	27%
Set thermostat to 76 (in summer)	Comfort preference	27%	30%

There were other barriers that were observed with less frequency. For example, in regards to the installation of CFLs, customers mentioned various infrequent objections such as security concerns, disposal issues, and dissatisfaction with operation (Figure 3-7). A few of these objections, such as "the light from CFLs fades my clothes," and "they give off too much heat," revealed customer misperceptions regarding CFLs.

Figure 3-7: There are Several Reasons Why People Don't Change a Majority of the Light Bulbs in Their Homes to CFLs. Which of the Following Reasons Apply?



Key Findings from the Residential Survey

Key findings presented within the framework of the residential survey are:

- **Attitudes and Beliefs**. The CEP Program's effect on customer attitudes and beliefs is ambiguous. While respondents in the participant community were more likely to believe that energy conservation is important and worth the effort, given the small sample size, these differences are too small to draw any conclusions regarding the impact of the CEP Program.
- **Awareness**. It is unclear whether that CEP Program raised awareness in energy-efficiency programs. While customer awareness of the incentive programs offered by We Energies and Focus on Energy has increased since the start of the CEP Program, such an improvement is unlikely to have resulted from CEP activities. In fact, respondents in the participant community reported less awareness of these programs than their counterparts in the control community. On the other hand, the increase of awareness of

Focus on Energy program's since the program's launch was greater in the participant community than in the control community.

- **Participation**. Survey results provided no evidence to suggest that the CEP Program increased customer participation in Focus on Energy programs, as the participation rates were identical in the participant and control communities (8%).
- **Behaviors**. The CEP Program did not increase energy-efficient behavior or reduce the barriers associated with such behavior. In fact, the control community reported higher rates of adoption for energy-efficient behavior than did respondents in the participant community. Furthermore, respondents in the participant community were more likely to report barriers to energy-efficient behavior than respondents in the control community. However, given the small sample size, any conclusions drawn from these results should be limited.

In conclusion, the survey results provide little evidence to suggest that the CEP Program had a positive effect on the attitudes, awareness, participation rates, and behaviors of customers in the participant community. Respondents in the participant community were no more likely to demonstrate energy-efficient attitudes and behavior than their counterparts in the control community.

3.3.3 Commercial Survey Results

Like the residential survey, the commercial survey focused on four areas: attitudes/beliefs, awareness, participation and behaviors. The following figures present some of the more interesting findings. The full results of the surveys may be found in Appendices G and H.

Commercial Attitudes and Beliefs

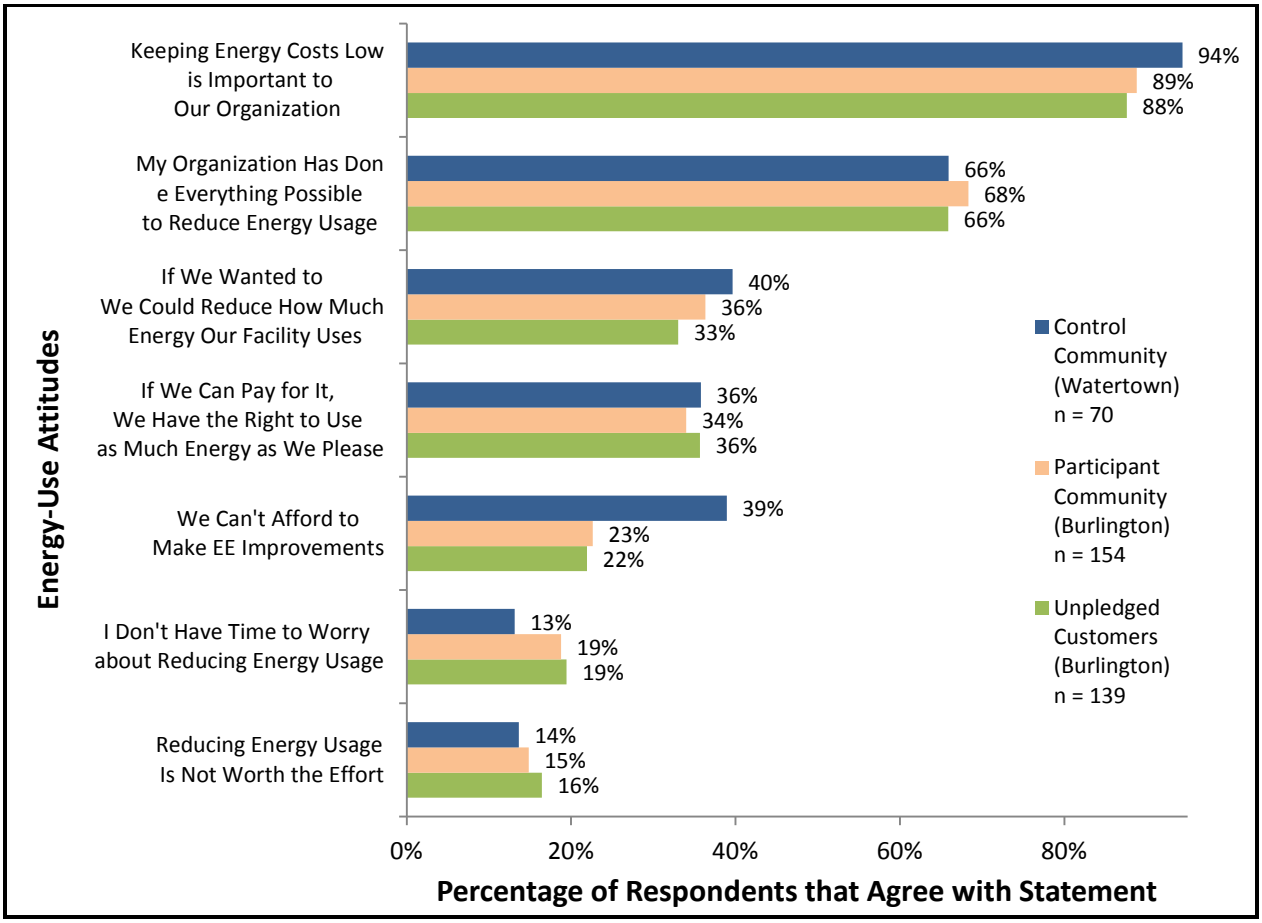
To determine the effect of the program on the participant community, attitudes are compared across three respondent categories: 1) respondents in the control community of Watertown; 2) all respondents in the participant community of Burlington; and 3) Burlington respondents who did not make the pledge to save energy. The inclusion of this third group is to determine the effect of the program on customers who did not directly participate in the program, but were likely exposed to program marketing.

Figure 3-8 summarizes the percentage of respondents that agreed with each energy-use attitude or belief. The majority of respondents in both communities felt that lowering energy costs is important and that reducing energy usage is worth the effort. However, respondents in the control community were more likely to report having adopted these energy-efficient attitudes than their counterparts in the participant community. This observation does not support the intended program theory of promoting energy-efficient attitudes within the participant community.

Customer responses provided mixed results regarding the feasibility of reducing energy usage. First of all, the majority of respondents in all communities believed that they had already reduced their energy use to the greatest extent possible, and a minority of respondents believed that they could further reduce energy consumption. While these two findings suggest that commercial customers view energy-efficiency opportunities as limited, the majority of respondents believed that they could at least afford to make energy-efficiency improvements if they so desired. Customers in the participant community were much more likely than customers in the control community to perceive energy-efficiency improvements as affordable.

In both communities, a minority of customers felt entitled to use as much energy as they like provided that they can pay for it. Also, respondents in the participant community were slightly more likely to feel that they don't have time to worry about reducing energy usage than respondents in the control community.

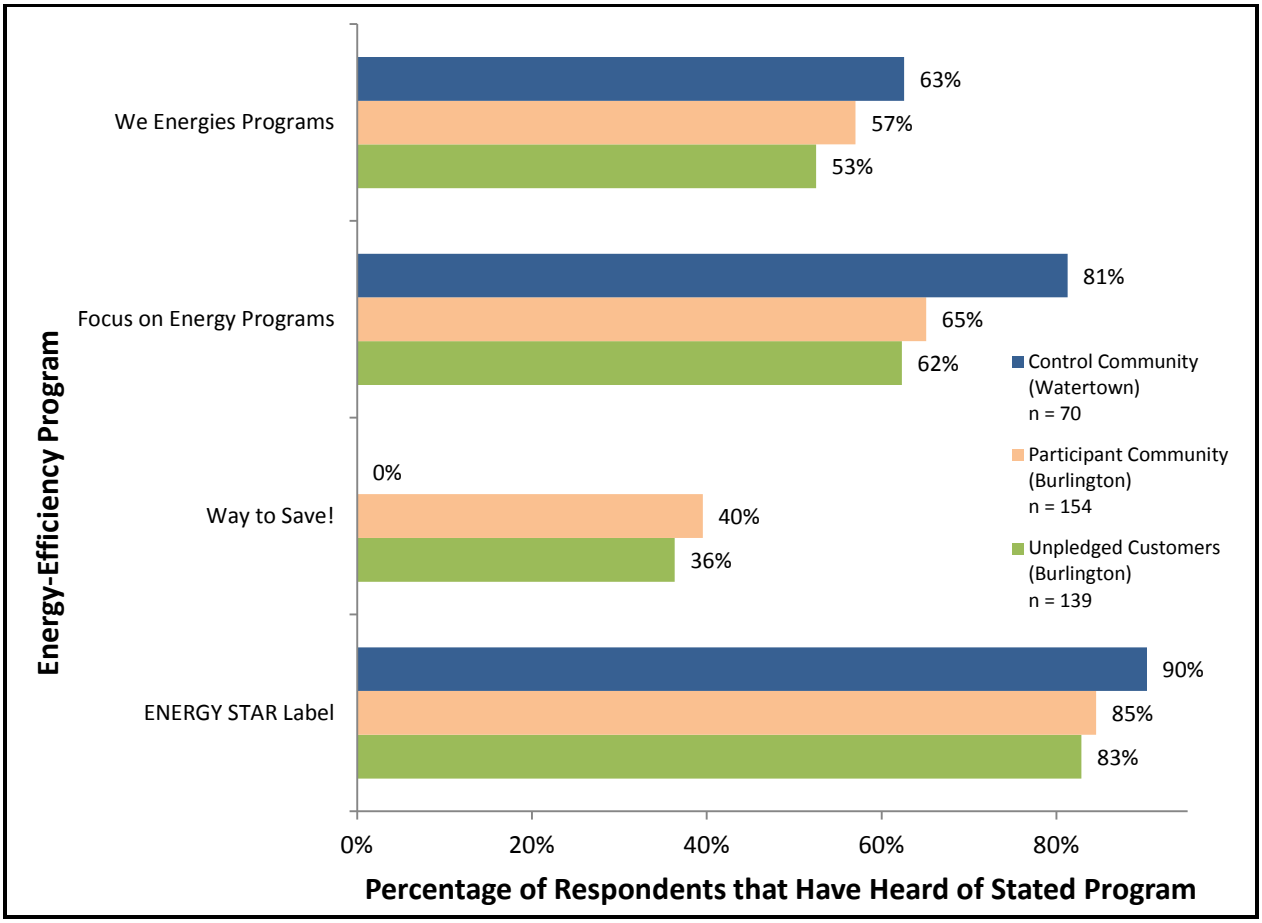
Figure 3-8: Summary of Commercial Customer Attitudes and Beliefs



Commercial Awareness

The survey sought to characterize customer awareness of energy-efficiency resources, such We Energies and Focus on Energy incentive programs, the *Way to Save, Burlington!* campaign and the ENERGY STAR label for appliances. Respondents were asked to rate their familiarity with these resources with one of the following survey responses: "I have not heard of this and don't know anything about it;" "I have heard of this but don't know much;" or "I have heard of this and know a lot about this." Figure 3-4 summarizes customer awareness among the control community, the participant community and unpledged customers in the participant community. One of the program objectives was to promote and support We Energies and Focus on Energy programs in the participant community. However, respondents in the control community demonstrated a greater level of awareness of the programs offered by We Energies and Focus on Energy than respondents in the participant community. Respondents in the control community were not asked to comment on the *Way to Save, Burlington!* program.

Figure 3-9: Summary of Commercial Customer Awareness



To illustrate how awareness has progressed since the program's launch, the responses from the first survey effort conducted in 2010/2011 (T1) are compared with the responses from the second

survey effort in 2013 (T2). Figure 3-10 compares T1 and T2 results for the participants' community and Figure 3-11 compares the same results for the control community. These figures indicate that customer awareness of all programs has increased in both communities since the start of the CEP Program. In fact, customer awareness of We Energies programs, Focus on Energy programs, and the ENERGY STAR label increased by greater extent in the control community than it did in the participant community. For example, while customer awareness of Focus on Energy programs increased by 24% in the participant community, awareness increased by 28% in the control community. Such observations suggest that increased customer awareness is not necessarily the result of CEP activities conducted in Burlington, but perhaps the result of general and widespread increase in customer awareness.

Figure 3-10: Commercial Customer Awareness since Program Launch, Burlington

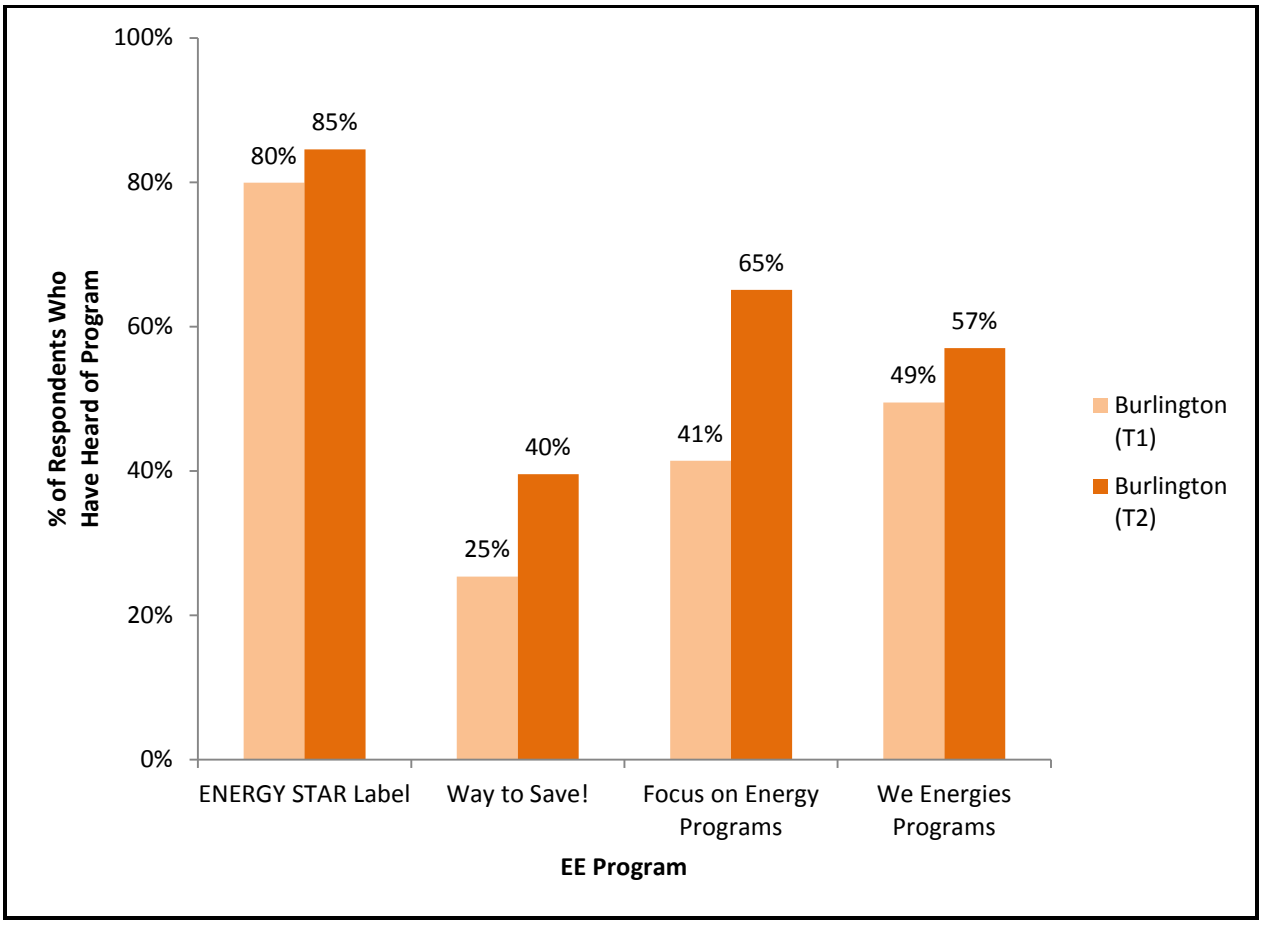
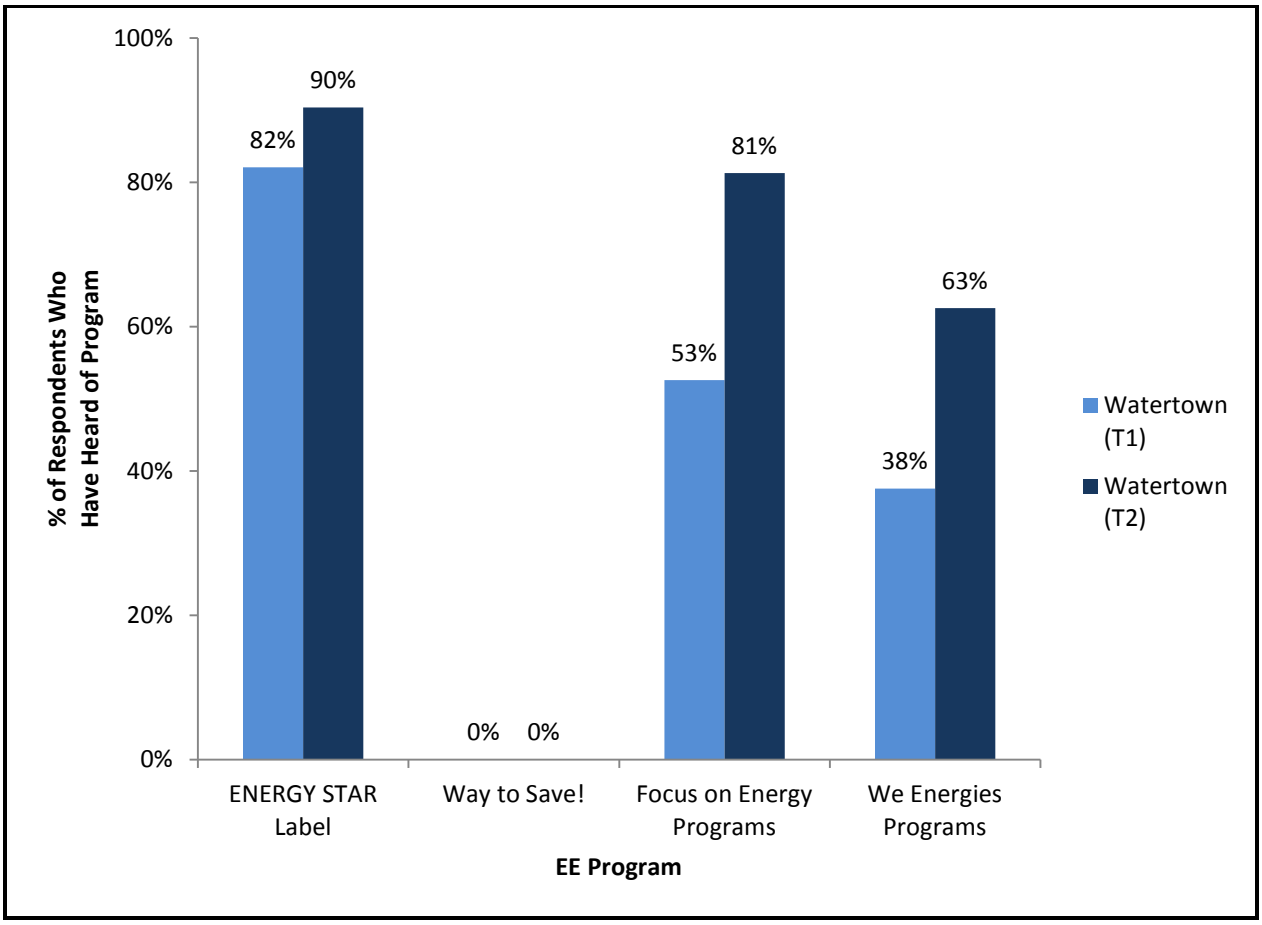


Figure 3-11: Commercial Customer Awareness since Program Launch, Watertown



The survey results also indicated that while customer awareness of the *Way to Save, Burlington!* campaign increased over the past three years, awareness among the general population of Burlington was modest. Only 40% of commercial respondents in the Burlington community reported that they had ever heard of the campaign. Only 11% of all respondents in the participant community indicated that they knew "a lot" about the campaign. Furthermore, only 10% of respondents reported having completed the pledge to save energy. There is also evidence that suggests that some customers do not associate the pledge to save energy with the *Way to Save, Burlington!* brand, as 31% of Burlington respondents who said that they pledged, indicated that they have never heard of *Way to Save, Burlington!* and that they knew nothing about the campaign.

Customers were also asked how they first learned about the *Way to Save, Burlington!* campaign. The most effective marketing channels varied according to customer type. For example, town meetings were the most commonly mentioned channel for the services group; the Burlington

Standard was the most common channel for the offices group; and the *Way to Save, Burlington!* billboard was the most common channel for the miscellaneous group.

Commercial Participation

In terms of customer participation, Burlington residents were no more likely to have participated in a Focus on Energy program. While 22% of respondents in the participant community reported having participated in a Focus on Energy program, 25% of respondents in the control community reported having done so. Unpledged respondents in the participant community were even less likely (17%) to have participated in a Focus on Energy program. These observations contradict the premise that the CEP Program drives customer participation in Focus on Energy incentive programs. Customers were not asked to comment on the extent of their participation in We Energies programs and the ENERGY STAR labeling program.

Commercial Behaviors

The survey sought to characterize to what extent commercial customers have adopted energy-efficient behavior and what barriers prevent them from doing so. Figure 3-12 and Figure 3-13 compares the adoption rates of energy-efficient behavior from the first survey effort (T1) to the second survey effort (T2). While the T2 results for the participant and control are somewhat similar, the control community generally experienced larger gains in adoption rates, especially for the installation of energy-efficient lighting.

A comparative analysis between the control group and the group of Burlington customers who did not pledge to save energy revealed that the levels of adoption for energy-efficient behaviors were similar across the two groups. The two groups were equally likely to have purchased an energy-efficient heating system, air conditioner, or water heater, and to have set the thermostat to 68 degrees in the winter and 76 degrees in the summer. Watertown customers, however, were slightly more likely to have already implemented certain energy-efficient behaviors, such as turn off the lights when not needed.

Figure 3-12: Adopted Commercial Behaviors since Program Launch, Burlington

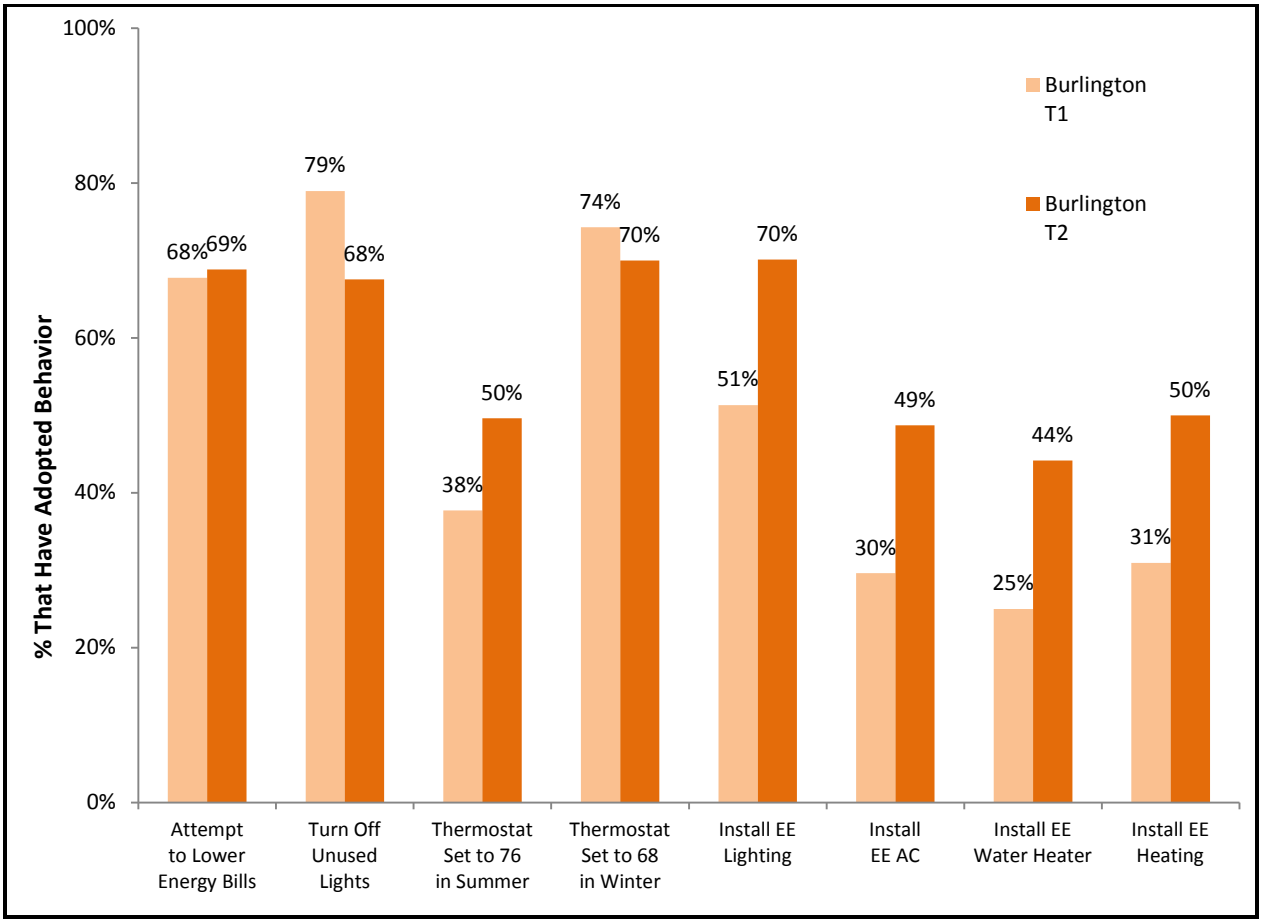
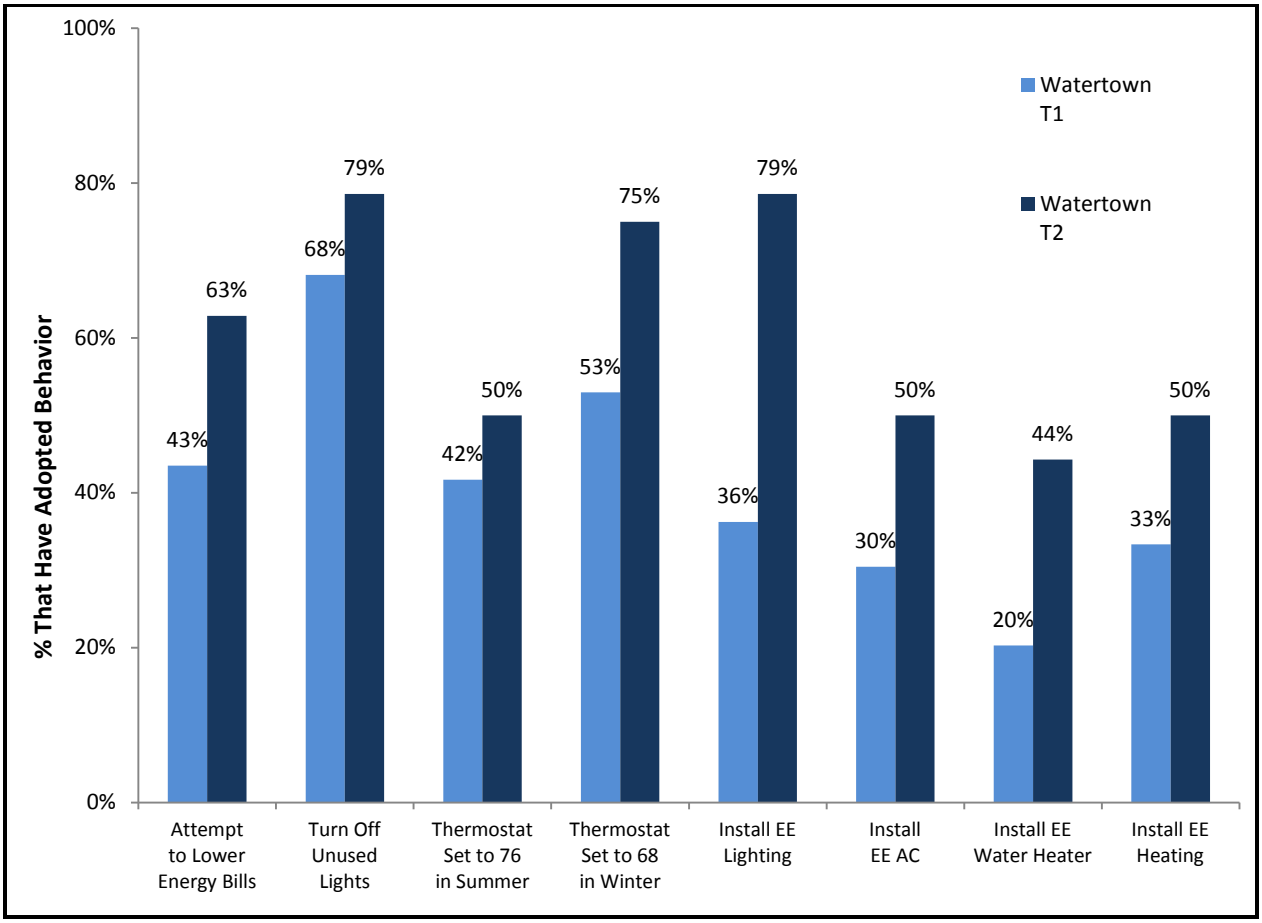


Figure 3-13: Adopted Commercial Behaviors since Program Launch, Watertown



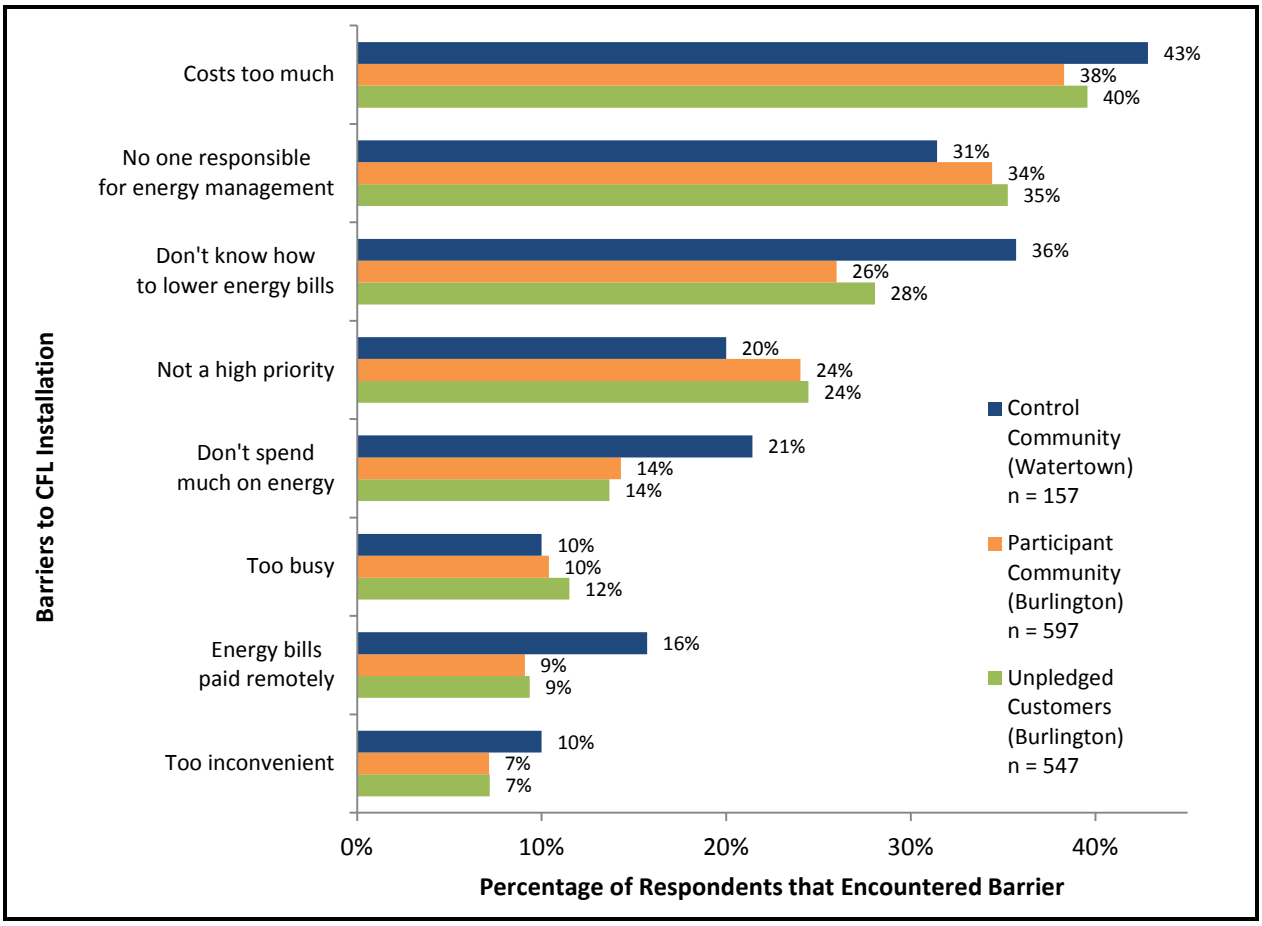
In regards to barriers, respondents had the perception that if equipment still functions, albeit inefficiently, it does not require replacement. This behavior suggests that customers are unaware of the energy- and money-saving potential of retiring old inefficient equipment with newer and more efficient equipment. Table 3-23 lists some of most common barriers energy-efficient behavior. The most common of these barriers were comfort preferences, especially in regards to thermostat settings, and satisfaction with the current equipment. In general, responses of customers in the participant community were comparable to the responses of customers in the control community.

Commercial customers were also asked what prevented them from attempting to lower their energy bills. The most common reason was that such measures cost "too much," as some of these respondents cited "poor payback" as an explanation of cost. Figure 3-14 presents some of the barriers that prevent customers from lowering their energy costs. Complete results for the adoption of energy-efficient behaviors and barriers to energy-efficient behaviors may be found in the appendices. Purchase snack

Table 3-23: Principal Barriers to Energy-Efficient Behaviors

Behavior	Principal Barriers	% of Burlington Respondents (n = 154)	% of Watertown Respondents (n = 70)
Efficient space heating	Current equipment still works	35%	26%
Efficient AC	Current equipment still works	25%	23%
Efficient water heater	Current equipment still works	32%	36%
Efficient lighting	Current equipment still works	20%	11%
Turn-off lights	Doing it as much as possible	18%	11%
Set thermostat to 68 (in winter)	Comfort preference	12%	16%
Set thermostat to 76 (in summer)	Comfort preference	25%	23%
Attempt to lower energy bills	Costs too much	38%	43%

Figure 3-14: There Are Several Reasons Why Organizations Don't Attempt to Lower Their Energy Bills. Please Indicate if any of the Following Reasons Apply to Your Organization.



Commercial Survey Key Findings

Key findings presented within the framework of the commercial survey are:

- **Attitudes and Beliefs**. Survey results provided no evidence that the CEP Program was effective in increasing energy-efficient attitudes and beliefs. Compared to respondents in the control community, respondents in the participant community were less likely to demonstrate energy-efficient attitudes and beliefs.
- **Awareness**. Survey results provided no evidence to suggest that the CEP Program was effective in increasing customer awareness of energy-efficiency program among the participant community. In fact, respondents in the participant community reported less awareness of the programs offered by We Energies and Focus on Energy than their counterparts in the control community. Furthermore, while awareness of these programs

did increase since the program's launch, the change was greater in the control community than in the participant community.

- **Participation**. Survey results provided no evidence to suggest that the CEP Program increased customer participation in Focus on Energy programs. In fact, the participation rate was higher in the control community (25%) than in the participant community (22%).
- **Behaviors**. The survey results did not illustrate any behavioral difference between the participant and control communities. The adoption rates of energy efficient-behaviors were similar between the two communities. Also, few noteworthy differences were observed in regards to barriers to energy-efficient behavior.

In conclusion, the survey results provide little evidence to suggest that the CEP Program had a positive effect on the attitudes, awareness, participation rates, and behaviors of customers in the participant community. Respondents in the participant community were no more likely to demonstrate energy-efficient attitudes and behavior than their counterparts in the control community.

3.3.4 Lessons Learned

This section presents observations from the preceding analysis in the framework of how lessons learned might be applied to future behavioral programs that may be implemented on a statewide basis in Wisconsin. Each statement is accompanied by a suggestion of how it might be considered in program implementation and a reference to supporting data.

Attitudes and Beliefs

- **Customers Attitudes Are a Major Potential Barrier to Adopting Energy-Efficient Behavior.** Survey responses indicate that the majority of customers feel that they have already done everything possible to reduce energy consumption and many feel that they could not reduce consumption if they so desired. The CEP Program has not had a major impact in improving these attitudes which are likely preventing customers from adopting energy-efficient behaviors. Future behavioral program will need to do more to give customers a clearer sense of their real potential for energy-efficient choices. See Figure 3-1 and Figure 3-8 for more information regarding residential and commercial attitudes and beliefs.

Awareness

- **Customers do not necessarily correlate the CEP program with the act of pledging.** Survey results revealed that half of the residential customers who made the pledge to save energy have never heard of the *Way to Save, Burlington!* campaign. For future

behavioral programs, more effective branding should be implemented so that customers associate the program with the act of pledging. For more information, see Residential Awareness & Participation or the survey results in the appendices.

- **The effectiveness of awareness channels varies by customer segment.** A multi-pronged approach allows the program to target multiple customer groups. If program administrators deem awareness lacking in a particular group, specific marketing channels may be ramped up to target a specific demographic category or commercial sector. In the case of residential customers, survey results indicated that the public billboard was the most effective method in reaching youth and mature customer groups, advertisements in the Burlington Standard newspaper was the most effective method in reaching the family customer group. In the case of commercial customers, the most effective methods were: town meetings for the services group; the Burlington Standard for the offices group; and the public billboard display for the miscellaneous group. For more information, see Awareness & Participation, Residential and Commercial Survey Results sections, or the survey results in the appendices.

Participation

- **Despite an increase in net program savings, self-reported participation rates in Focus on Energy programs are no greater in the participant community than in the control community.** While the tracking data analysis indicates that program savings increased during the span of the CEP Program, the survey results provides no evidence that the CEP Program drove customer participation in Focus on Energy programs. In future programs, implementers and evaluators should keep in mind that a self-reported survey results may not effectively reflect program savings that occurs on a macro level. For more information regarding participation rates, see the relevant subsection in the Residential and Commercial sections.

Behavior

- **The majority of customers already perceive their behavior as energy-efficient**. Survey results did not provide much information on barriers to energy-efficient behavior partly because the majority of respondents in both communities claimed to have already adopted such behaviors. More research is needed to determine whether these respondents have actually adopted such behavior or merely claim to have done so as the result of response bias or inaccuracy regarding their self-assessment. See Figure 3-5and Figure 3-12 for more information.
- **Dissatisfaction and misperceptions as barriers to CFL installation among residential customers.** While some customers cite dissatisfaction with lighting quality and disposal procedures, others cite imagined drawbacks such as “hearing aid interference,” the

"fading of clothes" and "excessive heat radiation." Such sources of dissatisfaction, whether real or conceived, are present to a small but noticeable extent. Despite the recent ubiquity of CFLs, some customers still require more education regarding the benefits of CFLs and the dispelling of CFL myths. See Figure 3-7 for more information regarding barriers to CFL installation.

- **Age-related and disability barriers appear to be a minor but increasingly important barrier to implementing energy-efficient behaviors.** As this demographic is expected to grow in the future, such barriers could prove to be increasingly important in the future. Results are difficult to quantify, as responses may be assigned under various categories.
- **Commercial customers face significant barriers to adopting energy efficient practices.** More so than residential customers, commercial customers encounter barriers resulting from costs, other priorities, and the lack of local personnel responsible for energy management. (See Figure 3-14 for more information.) Open-end responses indicated that it is a priority of many commercial customers, especially those in the service industry, to meet the comfort and demands of customers rather than reduce energy consumption. For the design future program efforts, more research needs to be done to determine how behavioral program might become more responsive to the needs of commercial customers.

3.3.5 Conclusions

Based on the analysis of tracking data and survey results, the goal of this impact evaluation is to conclude whether the CEP Program contributed to: 1) increased savings associated with We Energies and Focus on Energy rebate programs; and 2) increased attitudes, beliefs, awareness, and behaviors regarding energy efficiency.

The results of the impact evaluation were inconclusive in determining whether the CEP Program increased program savings in the participant community. On one hand, the results of the tracking data analysis indicated that that during the course of the CEP Program, Burlington experienced a net increase in program savings that far exceeded the stated goal of 1% savings per year. On the other hand, the results of the customer surveys indicate the percentage of customers who participated in a Focus on Energy program was no greater in the participant community than it was in the control community. These two findings suggest that while net program savings did increase during the CEP Program, customer participation rates were no greater in the participant community than they were in the control community. However, one caveat of this study is that the similarities between the participant and control communities are not sufficient to provide perfect comparison groups, so any conclusions drawn from this comparison are inherently limited.

There was no clear evidence to indicate that the CEP Program was effective in increasing the levels of customer attitudes, beliefs, awareness, and behavior regarding energy efficiency. While energy-efficient attitudes and beliefs have become more widespread in Burlington over the course of the CEP Program, such improvements were matched or surpassed by the control community. This finding suggests that the spread of energy-efficient attitudes and beliefs are not necessarily the result of the CEP Program, but the result of a widespread increase in such attitudes and behaviors. Therefore, while the evaluation did find increased energy-efficiency attitudes and behaviors in the participant community, these results are not attributable to the CEP Program.

In summary, the results of the impact evaluation indicate that while the CEP Program is good for identifying those customers who are more likely to participate in energy-efficient behavior and perhaps provide high returns in terms of energy savings, it is not effective in increasing energy-efficient behavior and attitudes in the community as a whole.